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TWENTY-SEVENTH ANNUAL REPORT

OF THE

STATE BOARD OF HEALTH

OF

SOUTH CAROLINA,

FOR THE

FISCAL YEAR 1906,

TO THE

LEGISLATURE OF SOUTH CAROLINA.

STATE BOARD OF HEALTH

JOHN A. LANGSTON

REMARKS

RESOLUTIONS

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LETTER OF TRANSMITTAL.

To His Excellency, D. C. Heyward, Governor:

I have the honor to submit to you the Twenty-Seventh Annual Report of the Executive Committee of the South Carolina State Board of Health, requesting you to transmit it to the General Assembly at the approaching session.

TRANSFER OF QUARANTINE TO THE UNITED STATES
TREASURY DEPARTMENT.

By Joint Resolution, the General Assembly authorized the State Board of Health to transfer to the United States Treasury Department, the control of the several quarantine stations of the State. The Executive Committee authorized the Chairman of the Board to carry out the details of this transfer, and to effect such transfer by sale or lease; some correspondence was held with Surgeon-General Walter Wyman, United States Public Health and Marine Hospital Service, but with no result. We had requested an appropriation to defray necessary traveling expenses, but this was not allowed. I happened to visit Washington, D. C., on the 6th of July, 1906, and sought an interview with Surgeon-General Wyman, and after conference, I addressed a letter to the Hon. L. M. Shaw, Secretary of the United States Treasury Department, and with Surgeon-General Wyman, presented the letter with the proposed offer of a lease of five (5) years; and after discussion, Mr. Shaw accepted the offer, and the several stations, with the buildings and equipments, at South Island, Georgetown County; at Fort Johnson, Charleston Harbor; Buzzard's Island, St. Helena Entrance, and Paris Island, Port Royal, were included in the lease to the United States Public Health and Marine Hospital Service, "to operate and maintain said stations carefully and efficiently for the protection of the health of the State of South Carolina, and the United States, during the entire term, and to make all necessary repairs thereto."

The lease was approved by Governor Heyward and properly signed by the Hon. L. M. Shaw, Secretary of the United States Treasury, and Dr. T. Grange Simons, Chairman of the Executive Committee of the South Carolina State Board of Health. The lease was dated August 31st, 1906, but it was September the 24th, 1906,

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before Assistant Surgeon Bayliss H. Earle, United States Public Health and Marine Hospital Service, took charge at Charleston, and some weeks later at Georgetown, St. Helena and Port Royal stations; this was due to the non-arrival of certain Civil Service blank forms used to swear in the officers and employees at the several stations. It was, however, arranged that all expenses to the State were to cease October 31, 1906; all of the officials and employees were retained at the several stations, except at Charleston, when Dr. Earle was directed to assume control, and the faithful and efficient quarantine physician, Dr. Robert Lebby, was displaced after twenty-three years of continued and unselfish devotion to the welfare of the State. The appropriation for Dr. Lebby's salary was made by the State Legislature for the full year of 1906, and it seems but a small requital for such long service that salary be paid for the balance of the year.

The opinion of the late Attorney-General, Hon. L. F. Youmans, was requested on this matter by the Board, but, unfortunately, his death prevented the opinion. We would urge and recommend that the Legislature enact such measures as will enable this act of justice to be carried out.

The matter as to the custody of the lease between the State Board of Health for the State, and the United States Treasury Department, was also referred to the late Attorney-General. We would be glad to be advised as to the proper disposal and custody of this document. As there will be now no occasion for the Annual Proclamation of Quarantine by the State of South Carolina, however, some power should be vested in the Chairman of the Board of Health, who, with the approval of the Governor, would be able to prevent the entrance from other States where epidemic diseases exist, and to place necessary restrictions upon railroads, cars, freight and passengers from such places, and thus avoid the delay and expense of convening the State Board of Health.

TRANSPORTATION OF THE DEAD.

The gross and frequent violations of the State laws, made to protect the people of the State and its communities from having disease brought by improper manner of preparing and transporting dead bodies of those dying from communicable diseases, demands legislation.

The railroad agents receive for transportation such bodies with the most illegal form of certificate, often a lead pencil note without name, age, color or sex, disease or place, or date of death, is

received; a slip of paper, "that the body did not die of infection," is received, and the corpse carried to helpless communities. Several cases have been referred by the Attorney-General to the County Solicitors, but the State Board of Health has no funds to secure proper affidavits and prosecute the offenders, and thus the violators escape penalty. We would urge such amendments to the present law that will fix definite penalties upon physicians, undertakers and transportation agents, who violate the law, so that proper certificates must be given prior to corpse being received, and all local Boards of Health and railroad stations be supplied with a full number of blanks for transportation of the dead, so that no reason will then exist for ignorance of the law, and so that afflicted families will not be embarrassed by delay in having their dead carried to their last resting place.

We would also recommend that the sum of \$300.00 (if so much be necessary), be appropriated for the printing of such blanks now required to be used in every State in the United States, Mexico and Canada, and also that penalty be fixed for violation of law.

PURE FOOD LAWS.

The Pure Food laws, enacted by United States Congress at last session, and now about to become operative in the coming year, will confer a great boon upon everyone, but the authority of Congress extends only to those articles made in one State and offered for sale in other States. This reaches all preparations for general distribution and sale, but the law will not affect a firm manufacturing adulterated foods or drugs, to be sold in the State where manufactured. Interstate laws still will permit goods in bulk without labels to be shipped; these can then be mixed or adulterated within the State; the labels, shipped at the same time, can be affixed, and such articles sold within the State without restriction or penalty, and any adulterated food or drugs, condiments, baking powders, or preserves sold in the State, and can only be seized by the United States government when shipped beyond State lines. Each State is expected to amend its present laws so as to protect its own citizens, and also to conform to the requirements of the National laws, and we would urge and recommend that the General Assembly adjust the present useless and obsolete food laws of the State so as to meet and secure the advantages of the Act of Congress in regard to pure food.

STATE HEALTH OFFICER.

The Bill creating the State Health Officer passed the House at the last session, but failed to have a third reading in the Senate prior to adjournment.

In States where such a State Health Officer has been created the results in sanitary reform have been marked, and the general health and prosperity of the people improved. Expert opinion is promptly given in matters of municipal or local sanitation, and outbreaks of preventable disease often averted by early detection and preventive measures early applied.

The outbreak of typhoid fever and other communicable disease in several of the State educational, penal and charitable institutions, in the past, and in communities, show the great need of an expert to investigate cause, and promptly determine as to measures of abatement. Matters of municipal sanitation in water supply, sewerage, ventilation, and causes of disease, and nuisances prejudicial to health, could be discovered and removed without delay.

RIVER POLLUTION.

Again, this important matter should receive the attention of the General Assembly, as in the near future, when the population of our towns and cities increase, the water supply from wells and cisterns must prove impure, and the water courses regarded as the only safe, available source of supply, and with the increase of population in such towns the waste from them and from factories, discharging into the streams, must render the water unfit for use.

With the construction of sewers, we should have also the proper disposal plants to refine and purify such sewerage prior to discharge into the rivers and streams, and thus avert danger. The establishment of a proper Commission to determine and prevent such dangers will be soon required.

Respectfully submitted,

T. GRANGE SIMONS, M. D.,
Chairman State Board of Health.

MINUTES OF THE FIVE MEETINGS OF THE STATE
BOARD OF HEALTH FOR THE YEAR 1906.

March 8th, 1906.

The first meeting of the State Board of Health in 1906 was held in the State House, at Columbia, on March 8th. The following mem-

bers were present: T. Grange Simons, M. D., Chairman, Charleston; Charles M. Rees, M. D., Charleston; Robt. Wilson, Jr., M. D., Charleston; George R. Dean, M. D., Spartanburg; W. H. Nardin, M. D., Anderson; Hon. LeRoy F. Youmans, Assistant Attorney-General, Columbia.

The meeting was called to order by the Chairman, Dr. T. Grange Simons, and the Secretary, Dr. James Evans, was requested to read the minutes of the last meeting of the Board, held in Columbia in December, 1905. There being no objection, the minutes were confirmed.

The Chairman, Dr. T. Grange Simons, called the attention of the members of the Board that the present meeting was the first held during the present year, and as a consequence, the reorganization of the Board would have precedence of any other action. On motion of Dr. Dean, the present officers were reëlected, and the organization as at present maintained. The Chairman read the Bill it was proposed to introduce in the Legislature, creating a State Health Officer, to be elected by the State Board of Health; also called attention to the necessity of insuring the South Island quarantine station, and asking the Legislature for an appropriation for this purpose.

Dr. Dean made his report on Endemic and Epidemic Diseases.

The Attorney-General and Governor D. C. Heyward were invited to be present at the meeting of the Board, and to express their views in regard to enforcing vaccination over the State, and the probable expense that would be incurred in its enforcement.

Dr. Charles M. Rees moved that the sum of \$500.00 (if so much be necessary), be appropriated to enable Dr. George S. Dean to visit each county in the State, and effect and organization for the speedy vaccination of the people of the State.

Dr. Robt. Wilson, Jr., moved that the Finance Committee be instructed to make a special report to the next meeting of the Board, of the funds that would be required to defray the expenses that would be incurred in carrying out the various recommendations.

Dr. W. H. Nardin offered the following resolution:

Resolved, That the State Board of Health will not receive or pay for a larger number of copies of the Annual Report of the State Board of Health than that required by the General Assembly.

The Chairman, Dr. Simons, made his report in regard to the transfer of the State quarantine stations to the United States government.

Dr. Rees offered the following resolution:

Resolved, That the Chairman of the State Board of Health, Dr. T. Grange Simons, be authorized to effect the transfer of the State

quarantine stations to the United States government, with the approval of the Governor.

There being no further business, the Board adjourned to meet in Columbia on April 17th, at 4 o'clock P. M., 1906.

JAMES EVANS, M. D.,
Secretary State Board of Health.

SECOND MEETING.

April 17th, 1906.

The second meeting of the State Board of Health was held in Columbia on April 17th, 1906. The following members were present: T. Grange Simons, M. D., Chairman, Charleston; Charles M. Rees, M. D., Charleston; George R. Dean, M. D., Spartanburg; A. A. Moore, M. D., Camden; W. H. Nardin, M. D., Anderson; James Evans, M. D., Secretary, Florence.

The meeting was called to order by the Chairman, Dr. T. Grange Simons, and the Secretary, Dr. James Evans, was requested to read the minutes of the last meeting. The minutes were read and confirmed.

The Chairman, Dr. T. Grange Simons, read a number of letters, which were read and received as information. He read a letter from Dr. W. Wyman, asking for certain information, which he was instructed to furnish the Surgeon-General of Public Health and Marine Hospital Service.

Dr. Nardin made a motion that the Finance Committee meet in Wright's Hotel, at 9 o'clock tomorrow morning, April 18th, 1906.

There being no further business, the meeting adjourned to meet tomorrow morning at the time designated by Dr. Nardin in his motion.

THIRD MEETING.

April 19th, 1906.

The State Board of Health met at Wright's Hotel, at 9 o'clock, A. M. ff

The Chairman of the Finance Committee read his report, which was as follows:

REPORT OF FINANCE COMMITTEE OF STATE BOARD OF HEALTH.

Columbia, S. C., April 18th, 1906.

Dr. A. A. Moore and Dr. Chas. M. Rees, in the absence of Comptroller-General Jones, the third member of the Committee, but who

could not be found, would report and recommend in their report the following:

1st. That of the amount of \$2,200.00 appropriated by the Legislature, that only the actual working expenses of the Board be paid from this sum, including the cost of publication of the annual transactions and a salary of \$500.00 a year to the Secretary of the Board.

2nd. That \$500.00, appropriated by the Legislature for the payment of a salary to a Clerk, be given to the Chairman of the Committee on Epidemic and Endemic Diseases, as compensation for clerical services to the Committee in enforcing quarantine and preventive measures, particularly vaccination, in all parts of the State.

3rd. The Committee would further recommend, that the Secretary of the Board be required to furnish, at each quarterly meeting, to the Chairman of the Committee on Finance, a detailed statement of all monies expended during the quarter past.

4th. That separate statements of funds expended for actual expenses of the Board in the work and of appropriation devoted exclusively to quarantine against contagious and infectious diseases, be made.

5th. That each of the statements be made to show the actual balance of each of these appropriations at each quarterly meeting.

(Signed.)

A. A. MOORE, M. D.,
Chairman.

CHAS. M. REES, M. D.,
Committee on Finance State Board of Health.

There being no further business, the meeting was adjourned, subject to the call of the Chairman, Dr. T. Grange Simons.

JAMES EVANS, M. D.,
Secretary State Board of Health.

FOURTH MEETING.

Columbia, October 9th, 1906.

The State Board of Health met in the Senate Chamber at the Capitol in Columbia, on October 9th, 1906.

In the absence of the Chairman, Dr. T. Grange Simons, Dr. A. A. Moore, of Camden, was requested to preside over the meeting. The following members were present: Dr. A. A. Moore, M. D., Camden; W. H. Nardin, M. D., Anderson; George R. Dean, M. D., Spartanburg; Robert Wilson, M. D., Charleston; T. Grange

Simons, M. D., Chairman, Charleston; James Evans, M. D., Florence.

The meeting was called to order by Dr. A. A. Moore, of Camden, who was requested by the members present to preside over the meeting in the temporary absence of the Chairman, Dr. T. Grange Simons. The acting Chairman, Dr. A. A. Moore, requested the Secretary, Dr. James Evans, to read the minutes of the last meeting of the Board, held at Wright's Hotel, in the City of Columbia.

Dr. Robert Wilson presented a letter from Dr. T. Grange Simons in regard to the transfer of the quarantine property of the State to the Federal government.

Dr. Robt. Wilson also read a letter from Dr. Green, of Charleston, which, on motion, was referred to the Secretary, Dr. James Evans, for consideration.

Dr. Wilson moved also that the Chairman, Dr. T. Grange Simons, take up the matter of the violation of the law in regard to the transportation of dead bodies, and confer with the Attorney-General as to the proper course to pursue to remedy the evil, and guard against any evils which may follow this disregard of the law.

Several other papers were presented by Dr. Wilson, which were referred to the Secretary, Dr. James Evans, for consideration.

The Secretary read a communication from a citizen of Brookland, who complained that the unsanitary condition of a lot adjoining his residence seriously threatened the health of his family, and that he could not obtain any relief from the local Board of Health. Dr. Dean moved that the Secretary of the State Board of Health inform the party that he had the law in his own hands and all that was required was to go before a Magistrate and sue for relief.

Dr. George R. Dean, Chairman of the Committee on Epidemic and Endemic Diseases, moved that he be authorized by the State Board of Health to require the county agents to report to him at stated intervals, whether the incorporated towns and cities have made any effort to enforce vaccination among the schools, and also among the people generally in every quarter of the State.

Dr. W. H. Nardin, Chairman of the Committee on Penal and Charitable Institutions, made his report on their present condition, and drew attention particularly to the overcrowded condition of them at the present time, and the pressing necessity that some steps should be taken to afford them relief.

Dr. Wilson moved that the law in regard to vaccination be rigidly enforced among all classes of the people residing in any section of the State.

The Secretary, Dr. James Evans, was requested to notify Dr. Dean, to whom vaccine virus was forwarded, and the quantity supplied them.

There being no further business to transact, the Board adjourned to meet at Columbia, December 11, 1906.

JAMES EVANS, M. D.,
Secretary State Board of Health.

FIFTH MEETING.

Columbia, December 11, 1906.

The fifth meeting of the State Board of Health was held in the office of the Secretary of State in the Capitol, in Columbia, on December the 11th, 1906.

The following members of the Board were present: T. Grange Simons, M. D., Chairman, Charleston; Robert Wilson, M. D., Charleston; A. A. Moore, M. D., Camden; W. H. Nardin, M. D., Anderson; George R. Dean, M. D., Spartanburg; James Evans, M. D., Florence.

The meeting was called to order, and the Secretary requested to read the minutes of the last meeting, held October 9th, 1906, in Columbia.

Dr. George R. Dean, Chairman of the Committee on Epidemic and Endemic Diseases, read his report, which was ordered to be printed in the Annual Report.

Dr. Dean moved that the present law in regard to vaccination be repealed, and that in the future the State Board of Health have exclusive charge of vaccination, and shall determine the compensation for it.

The report of the Committee on Finances of the State Board of Health was then read by the Secretary, Dr. James Evans.

Dr. Nardin then presented his report on the Penal and Charitable Institutions of the State.

Dr. T. Grange Simons moved that the next Legislature be asked to revise the present laws in regard to the transportation of dead bodies, and that such changes be made as will enable the State Board of Health more rigidly to enforce its provisions.

Dr. Simons moved that inasmuch as the control of the quarantine of the City of Charleston had been transferred to the United States government, thereby retiring Dr. Lebby of his duties as quarantine officer on the 1st of October, 1906, that Dr. Lebby's salary for same be continued until the first of January, 1907.

Dr. Simons was sustained in his action in regard to Mr. Tubs, in withholding his diploma.

Dr. Dean moved that the suggestions made in his letter of transmittal be approved and that the Legislature be asked to take speedy action on the same. Dr. Dean moved that two members of the Board be appointed to appear before the Legislature to advocate such measures before that body as the Board shall direct.

Dr. Nardin presented a bill for attending cases of smallpox, by Dr. Sanders of Anderson, and recommended that the Legislature be asked to pay the same. There being no further business, the Board adjourned.

JAMES EVANS, M. D.,
Secretary State Board of Health.

REPORT OF COMMITTEE ON PENAL AND CHARITABLE INSTITUTIONS, FOR YEAR 1906.

PENITENTIARY REPORT, OCTOBER 4, 1906..

We find the penitentiary, in all respects, being well kept and, as usual, in fine sanitary condition, and only regret the fact that the hospital for tuberculosis (of which we made mention in last report "of being almost ready for use"), is incomplete from the fact of not having the necessary furnishings, which are being now attended to.

The last report gave 647 prisoners, on October 3d, 1905, and the same date this year 703, showing an increase of 56. The number of deaths from all causes amongst the convicts is 18, and 13 of this number died of tuberculosis, showing the need of the new hospital. There were only 4 patients in general hospital, and all of them suffering from pulmonary tuberculosis. While three out of the number told me that they had "lung trouble" before entering the prison, one said his trouble began after one year's stay in prison.

STATE HOSPITAL FOR THE INSANE.

We have the old cry of want of more room, "over crowding"; the increase this year, so far, has been 480, and three months "yet to be heard from", which, if the usual increase continues, Dr. Babcock estimates will amount to 600.

Several new buildings, spoken of in last report, have been completed, and relieves the plethora of last year, but not sufficient to overcome the additions of new admissions. Still there are two

beds, where only one should be; 1,200 cubic feet is a small allowance in hospital for convalescents, to say nothing of the sick, should be 2,500 cubic feet, where only 1,080 exists. In one ward where only 25 should be, we found as many as 75 sick. In stating these facts, we have only to call attention and hope that something can be done in near future looking toward relief.

Deaf and Blind Institution we found in first-class order, and just ready for the opening fall session. The premises have been thoroughly cleansed and the sanitary conditions all that we could wish. There were enrolled last year (1905) 182. Deaths, none; serious illness, none during the year. The Institution has electric light and water plant of its own, and expects to have electric car line soon, in operation with Spartanburg street car line. Need a new kitchen and stove room, for which a petition will be made to next session of Legislature.

Number of deaf	112
Number of blind	70

Number of whites	135
Number of colored	47

Total	182
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Respectfully submitted,

W. H. NARDIN,
Chairman.

DR. G. R. DEAN'S REPORT ON SMALLPOX.

Columbia, S. C., October 9th, 1906.

Mr. Chairman and Gentlemen of the Board:

I have nothing new or of great interest to report for my department. During the summer, after May, I directed our agents to discontinue vaccinating until the fall of the year, and consequently but little has been done in this direction. There has been at all times during the year, here and there a few scattering cases of smallpox. But they were soon stamped out, and others reported to take their place. But no serious outbreaks. At some places our agents have met with some opposition from parents and teachers in schools; usually, however, these have been overcome. At one place a school was broken up for a while, but again started up with success to our agents. I would call the attention of the Board to the fact that

some small chartered towns, I have understood, refuse to vaccinate their school children, and I think it advisable that this be examined into and let the Board see then if our mandates are obeyed there as well as in the country districts. Two localities have reported outbreaks of smallpox recently—Greenville and Georgetown Counties. I think now is the time for us to begin our work of vaccination and see to its fulfillment.

Respectfully submitted,

G. R. DEAN,

Chairman Committee on Epidemic and Endemic Diseases, State Board of Health.

In regard to the vaccination in chartered cities and towns, it is urged that the Chairman of the Committee on Epidemic and Endemic Diseases of this Board be authorized to instruct the county agents of this Board to investigate the status of vaccination in every such town or city in his or their county, and report to said Chairman every quarter, so that the State Board of Health may take any action needed by a failure of such town or city to act in accordance with the State law and the orders of the State Board of Health.

Bureau of Commerce and Labor,

Washington, November 1, 1906.

Dr. James Evans, Member State Board of Health, Florence, S. C.

Dear Doctor: In separate wrapper I am sending you copy of pamphlet No. 106, Extension of the Registration Area for Births and Deaths; a practical example of coöperative census methods as applied to the State of Pennsylvania.

If your State is a registration State, I am sure that you will be interested in the addition of important new registration territory by the adoption of methods which have already proved successful in your State.

If your State is found in the list (page 2) of States not yet possessing satisfactory registration of deaths, I desire to assure you of the interest of this Bureau and its desire for cordial coöperation with your Board in taking steps to secure the passage and effective enforcement of adequate registration laws, and would especially ask your attention to the marked paragraphs (pages 15 and 16), calling your attention to the fundamental importance of reliable vital statistics for the use of an efficient public health service.

Very respectfully,

CRESSY L. WILBUR, M. D.,

Chief Statistician.

Washington, September 15, 1906.

Dr. T. Grange Simons, Chairman State Board of Health, Charleston, S. C.

Sir: The Bureau desires information regarding the crusade against tuberculosis in your State, and would greatly appreciate an early reply to the following questions:

1. When was the movement first started?
2. Is there a State society for the study and prevention of tuberculosis? Give the name of the society and its location.
3. Are there local and city societies of a similar character?
4. Give the names and locations of the various State sanatoria, public and private sanatoria, agricultural colonies, dispensaries, etc.
5. What official action has the State taken for the prevention of tuberculosis? Please furnish copies of the laws, regulations, circulars, etc., issued.
6. Is notification of the disease compulsory?
7. Is there any special provision for the care and treatment of tubercular children, either by the State or private societies?
8. Does your Board collect vital statistics of this disease?

Owing to the importance of the subject matter of this inquiry, I should be very thankful if you will supply me with all the information you may be able to gather of the various questions submitted above. A similar letter has been sent to the other States, and it is intended to tabulate the data received for the information of health officials and persons interested in the prevention of tuberculosis.

Respectfully,

WALTER WYMAN,
Surgeon-General.

Revised List of Exchanges.

Illinois Medical College, Chicago, Willard C. Sanford, M. D., Columbus Mem. Bldg.
 Moss Institute of Technology, Boston, R. P. Bigelow.
 Ohio State Library, Columbus, Miss Mary VanZandt.
 Casa de Orates, Santiago de Chile, Pedro Moulton.
 Ira W. Porter, 316-317 Sheely Block, Omaha, Neb.
 Western Society of Engineers, Chicago, Ill.
 K. L. Sharp, University of Illinois, Urbana.
 State Board of Health of Pennsylvania.
 State Board of Health of Connecticut.
 State Board of Health of New Hampshire.
 State Board of Health of Kansas.
 Board of Health, Province of Quebec.
 State Board of Health of Illinois.
 State Board of Health of New York.
 State Board of Health of New Jersey.
 State Board of Health of Washington, D. C., Newman, Spokane.
 State Board of Health of California.
 State Board of Health of Indiana.
 State Board of Health of Massachusetts.
 State Board of Health of West Virginia.
 State Board of Health of Wisconsin.
 Board of Health of Province of Ontario.
 Board of Health of District of Columbia.
 Board of Health of Mexico, Mexico.
 Board of Health of Santiago de Cuba.
 United States Department of Agriculture.
 Board of Trustees of New York City.
 Health Commissioners of St. Louis.
 Karsirlichen Gesund Leitsamte, Berlin.
 Board of Health of New York City.
 Board of Health of Chicago.
 Board of Health of Denver, Colorado.
 Consejo Superior de Salubridad de Mexico.
 Janns, Berlin.
 Gonsejo Salubridad de Mexico, Momero Especial.
 State Board of Health of Maine.
 State Board of Health of Rhode Island.
 State Board of Health of Delaware.
 State Board of Health of Ohio.
 New York Academy of Medicine, John S. Brown.
 State Board of Health of Virginia.
 Amherst College Library, Amherst, Mass., W. I. Fletcher.
 H. C. Nash, Leland Stanford, Jr., University, Palo Alto, Cal.
 Ohio State University, Columbus.
 Worthington C. Ford, American Statistical Association, Boston.
 University of Kansas, Lawrence.
 W. H. Allen, University of Pennsylvania.
 Dr. I. Dyer, Orleans Parish Medical Society, 163 University Place.
 J. E. Cowgill, 536-537 Luckke Building, Indianapolis, Ind.
 H. H. Courtwright, Great National Building, Chicago, Illinois.
 F. F. Westbrook, Minneapolis, Minnesota.
 Iowa State Library, Des Moines, Iowa.
 John Crerar Library, 6th floor Marshall & Field Co. Building, Chicago, Illinois.
 Manhattan Life Insurance Company, 66 Broadway, New York.
 L. G. Finley, M. D., McGill University, Montreal, Canada.
 Library of British Museum, London, England.

James Thayer Geronid, University of Missouri, Columbia, Missouri.
 Marine Hospital Service, Honolulu, H. I., G. E. Cafer.
 J. M. Williams, President Board of Health of San Francisco.
 Iowa State University, Iowa City, Bertha G. Ridgeway.
 Dr. P. D. Von Enke, Department Agriculture, Washington, D. C.
 Medical Record, No. 51 Fifth Avenue, New York.
 Joseph Y. Porter, State Health Office, Jacksonville, Fla.
 Dietetic Hygienic Gazette, 503 Fifth Avenue, New York.
 W. F. Morrow, State Board Health, Kansas City, Mo.
 Journal of Tuberculosis, Asheville, N. C.
 Miss Lilian Branelt, Prevention of Tuberculosis, New York.

Officers of the State Board of Health.

MEMBERS OF EXECUTIVE COMMITTEE.

Dr. T. Grange Simons, Chairman, Charleston.

Dr. A. A. Moore, Camden.

Dr. C. M. Rees, Charleston.

Dr. Robert Wilson, Jr., Charleston.

Dr. W. H. Nardin, Anderson.

Dr. George R. Dean, Spartanburg.

Dr. James Evans, Florence.

Hon. A. W. Jones, Comptroller-General.

Hon. U. X. Gunter, Attorney-General.

STANDING COMMITTEES.

On Ordinances and Sanitary Code—Dr. Robert Wilson, Jr., W. H. Nardin, M. D.; Attorney-General Gunter.

On Epidemic and Endemic Diseases—Drs. George R. Dean, A. A. Moore and Robert Wilson, Jr.

On Registration of Vital Statistics—Drs. James Evans, A. A. Moore and Attorney-General U. X. Gunter.

On Quarantine—Drs. C. M. Rees, Robert Wilson, Jr., and Attorney-General U. X. Gunter.

On Sanitary Condition of State Penal and Charitable Institutions—Dr. W. H. Nardin, Comptroller-General A. W. Jones and Attorney-General U. X. Gunter.

On Sanitary Inspection of Schools—Drs. Robert Wilson, Jr., W. H. Nardin and James Evans.

On Local and Sub-Boards of Health—Drs. James Evans, W. H. Nardin and Attorney-General U. X. Gunter.

Revised List of Local Boards of Health.

ABBEVILLE COUNTY.

Abbeville.—None.

Coronaca.—Dr. J. P. Morrow, President; Dr. J. D. Dansten, J. S. Klugh, J. W. Ligon, J. D. Fooshe, Secretary.

McCormick.—Dr. J. P. Robinson, President; J. H. Sanders, H. Baughman, James Cortman, Jr., B. I. Burdshaw.

Troy.—L. N. Kennedy, M. D., President; C. L. Kennedy, J. B. Owen, W. T. Bradley, J. F. Wideman, L. M. Dendy.

Wagener.—Dr. L. B. Etheridge, G. E. Gantt, J. W. Baughman, Secretary.

AIKEN COUNTY.

Aiken.—Secretary, R. L. Gunter.

Ellenton.—W. H. Jones, President; B. T. Foreman, James R. Dunbar, Dr. A. W. Bailey, R. J. Dunbar.

Hamburg.—Dr. W. E. Mealing, President; J. H. Gityen, W. E. Lykes, B. M. Youngblood, J. E. Hammond.

Salley.—Thomas Stansell, E. A. Glover, A. F. Dicks, Dr. J. A. Milhous, Dr. H. J. Salley.

ANDERSON COUNTY.

Williamston.—Dr. F. M. Lander, Wm. Ramsey, W. T. Lander, R. P. Ransom, Chairman; B. F. Russell, Secretary.

Pendleton.—Dr. Duvant, Dr. W. W. Watkins, H. P. Sitton, J. I. Hunter, Secretary; Darwin Reid, President.

Belton.—Dr. W. R. Hanie, D. A. Geer, J. E. Horton, E. B. Rice, G. W. McGee, J. A. Horton, Intendant.

Anderson.—Dr. White, Chairman; Dr. Dickert, General Bonham, M. Russell, J. B. Townsend, Secretary.

BARNWELL COUNTY.

Blackville.—J. V. Baxley, Chairman; R. A. Gyles, G. D. C. Lange, H. D. Still, B. J. Hammett.

Bamberg.—J. B. Black, M. D., President; H. C. Folk, J. D. Felder.

Barnwell.—Dr. L. E. Patterson, President; Col. J. J. Brown, W. W. Moore, J. S. Shack.

Elko.—Ashley Stansell, J. H. Hair, W. B. Johnston, L. A. Thompson, Dr. W. L. Smith, Secretary.

Midway.—Dr. J. F. Bagath, President; S. C. Williams, C. C. Ellzey, L. M. Fender, A. R. Ramsey.

Williston.—W. C. Smith, President; J. C. Hairheath, L. S. Mellichamp, Secretary; W. T. Wills, J. A. Roundtree.

Govan.—J. R. McCormick, Secretary.

Sieglingville.—O. W. Barker, Secretary.

BERKELEY COUNTY.

Maryville.—J. E. Ancrum, Isaac Nelson, P. Graham, S. W. Barnwell.

Eutawville.—Gen. C. St. G. Sinkler, President; Dr. W. Taylor Edmunds, Secretary; Rev. J. W. Motte, S. A. Eadon, T. R. Seely.

Summerville.—J. B. Gadsden, A. W. Taylor, H. M. Manigault, N. A. Hunt, Dr. F. J. Carroll, George Tupper, Secretary.

St. Stephen.—Dr. M. A. Floyd, Secretary; Dr. L. A. Douglass, G. T. Parris, D. M. Larrenz, F. N. Schipman, J. F. Welch.

Mt. Pleasant.—C. McKinley, President; R. V. Royall, Secretary; James Hampton, G. von Kolnitz, W. J. Edmonston.

BEAUFORT COUNTY.

Port Royal.—H. R. Walker, Chairman; John Stickley, W. A. Smith, Dr. M. B. Cope, Secretary.
Beaufort.—J. S. Kennedy, Secretary.

CHARLESTON COUNTY.

Moultrieville.—J. H. T. Konig, President; D. Kernan, Charles A. Brown, Henry Behrman, Dr. R. S. Kirk.

CHEROKEE COUNTY.

Gaffney.—W. T. Thompson, Secretary.

CHESTER COUNTY.

Fort Lawn.—W. H. Thomasson, G. W. McKown, Secretary.
Hazlewood.—Dr. B. E. Kele Banks, J. P. Ragsdale, Andrew Pedau.
Blackstock Township.—Cornwell H. McCown, T. J. Cunningham.
Landsford.—Dr. W. B. Cox, Secretary; I. D. Collins, Hugh Hindman.
Chester.—Dr. Harvey E. McConnell, Chairman; M. Carpenter, J. J. McNinch, Col. N. P. Johnson, Secretary; J. S. Colvin, Chairman.
Baton Rouge.—Dr. I. M. McCollum, Secretary; H. C. Worthy, J. H. Love.
Halsellville.—Dr. I. S. Wise, I. B. Stokes, W. A. Carswell.
Blackstock.—J. E. Craig, W. D. Douglass, D. A. Deitz, J. W. Cornwell.
Lewisville.—Dr. R. L. Douglass, Secretary; J. P. Gaston, R. L. Strand.
Richburg.—R. F. Crockett, G. C. Dill, D. G. Lewis, V. B. Millen, Dr. C. L. Clawson, Secretary.
Rossville.—Dr. C. B. McCown, D. Gober Anderson, W. B. Ferguson; J. S. Wise, Secretary.

CLARENDON COUNTY.

Foreston.—Dr. J. A. Briggs, R. Adman.
Summerton.—Rev. B. Smith, W. R. Mood, Dr. L. C. Stokes, Secretary.
Alcolu.—Dr. T. J. Davis; E. Capers, Secretary.
Manning.—Dr. C. B. Gelger, President; B. P. Thames, Secretary.
Pinewood.—Dr. P. M. Sally, Chairman; R. F. Epperson, Secretary; Dr. D. N. Murray, H. F. Stack, A. W. Griffin, P. H. Broughton.

CHESTERFIELD COUNTY.

Has none.

COLLETON COUNTY.

Walterboro.—C. C. Tracy, Secretary; T. J. Blanchard, A. C. Schaffer, J. S. McTier, C. G. Henderson, Dr. H. W. Black, James S. Clocher, Dr. E. H. Williams.
Jacksonboro.—Dr. H. E. Bissell, C. W. Butler; W. B. Sanders, Secretary; J. H. Rodgers, T. W. Linder.
Grover.—Dr. W. M. Shuler, President; J. N. Westbury, Secretary.

DORCHESTER COUNTY.

St. George.—C. M. Gavin, Secretary.

DARLINGTON COUNTY.

Darlington.—Henry Sanders, Secretary; Dr. A. T. Baird, Dr. W. S. Galloway, Robert Keith Dargan, Jesse Williams.
Hartsville.—J. L. Coker, Secretary; J. W. Davis, L. Vaughan, Dr. B. L. Norwood, President; H. L. Law.

EDGEFIELD COUNTY.

Ridge Spring.—Dr. D. B. Froutis, Secretary; Dr. F. G. Asbill.

Delmar.—Dr. P. W. Hite, A. L. Eargle, J. Ed. Shealy, Paul Shealy, O. Cannon.

Parksville.—Rev. G. W. Bussey, Hon. W. J. Talbert, J. H. Parks, J. E. Moultrie;
Dr. W. G. Blackwell, Secretary.

Edgefield.—Dr. F. W. P. Butler, President; Dr. C. P. DeVan, G. G. Lewis.

Johnston.—Dr. D. P. LeGrove, Secretary.

FAIRFIELD COUNTY.

Winnsboro.—Dr. L. B. Madden, President; Dr. J. C. Buchanan, Dr. R. B. Hannah,
Dr. David Aiken, Dr. J. R. McMaster.

Ridgeway.—T. L. Rosboro, Secretary; Dr. J. R. Desportes, Chairman; D. N. Ruff,
J. S. Edmunds, C. L. Wray.

FLORENCE COUNTY.

Florence.—Dr. F. P. Covington, Chairman; Dr. William Ilderton; J. J. Brown,
Secretary; C. D. Bristow, R. C. Commander; J. C. Brunson, Secretary.

Timmons ville.—J. B. Whitehead, J. Holland Call, E. B. Turner; Duncan McKenzie,
Secretary; Dr. J. A. Cole, Chairman.

GEORGETOWN COUNTY.

Georgetown.—W. E. Sparkman, President; E. W. Kaminski, E. M. Lucas, A. J.
Dunmore; J. Jenkins Hucks, Secretary; Thomas P. Fraser.

GREENVILLE COUNTY.

Greenville.—F. S. Rowley, Chairman; C. D. Stadley, Alex. Finlay, J. M. McGee,
B. F. King, J. S. McGee, R. S. Morgan, Thomas L. Gilreath, W. B.

Madden, F. M. Perry, A. H. Donaldson; C. A. Simpson, Secretary.
Travelers Rest.—B. R. Cox, President; J. D. Cooper, T. B. Cunningham, W. C. B.
Pike, J. I. Coleman.

Piedmont.—Dr. C. T. C. Giles, Chairman; Dr. J. H. Donald; Dr. J. C. Mitchell,
Secretary.

GREENWOOD COUNTY.

Greenwood.—J. R. Leavell, Secretary; J. B. Hughey, President; A. J. Bell, R. M.
Hays, J. R. Leavell, Jr., J. S. Mars.

HAMPTON COUNTY.

Varnville.—Dr. J. W. Colson, Dr. C. P. Vincent.

Luray.—T. W. Smith, Secretary.

Lincolnton.—Daniel Adger; R. W. Nesbit, Secretary.

HORRY COUNTY.

Has none.

KERSHAW COUNTY.

Camden.—J. W. Corbett, M. D.

Kershaw.—J. E. W. Haile, M. D., President; J. M. Kirkley, T. J. Gregory, J. B.
Witherspoon, John W. Truesdale; Dr. C. B. Horton, Secretary.

LANCASTER COUNTY.

Has none.

LAURENS COUNTY.

Princeton.—Dr. Casper West.

Laurens.—Col. T. B. Crews, President; H. E. Gray, Dr. J. P. Simpson, W. W. Jones; P. A. Simpson, Secretary.

Waterloo.—Dr. L. M. Henderson, T. B. Anderson, J. B. Wharton, B. A. Anderson.

Cross Hill.—Dr. T. E. McSwain, Secretary; Dr. J. H. Miller, Dr. M. E. Goddard, Dr. E. M. Pinson; J. P. Smith, President.

Mountville.—B. R. Austin, M. A. Leaman, Fay Larkin, J. M. Simmons; Dr. A. Fuller, Secretary.

Clinton.—E. C. Briggs, Secretary; B. L. Wright, Dr. S. L. Bailey, W. E. Owens, S. H. Davidson.

LEE COUNTY.

Bishopville.—R. E. Eames, W. L. Parrott, H. W. Parker, O. C. Scarborough, H. B. Newsome, Secretary.

LEXINGTON COUNTY.

Batesburg.—Dr. T. S. Fox, Chairman; Dr. L. M. Mitchell.

Lexington.—James E. Rawl, President; George F. Drafts, H. O.

Swansea.—Dr. J. L. Johnson, Secretary; Dr. J. R. Langford, Chairman; W. M. Johnson, C. H. Corbett, W. H. F. Rast.

Peak.—W. G. Dickert, Secretary; Dr. George Douglass, E. M. Stuck, W. H. Suber, B. F. Swetenberg.

Irmo.—Dr. J. E. Lee, Rev. G. W. Davis, Rev. H. E. Lewis, J. T. Warner, J. P. Sheely.

MARION COUNTY.

Latta.—Dr. F. M. Munroe, Secretary; G. W. Munn, G. C. Crawford.

Marion.—W. J. Montgomery, H. Mullins, J. W. Johnson; Dr. A. McIntyre, Secre-
E. T. Wilcox, President.

Dillon.—Dr. T. J. Weatherly, President; S. S. Rosier, C. W. Davis, Dr. J. P. Ewing,
A. J. C. Cottingham; J. L. McEachern, Secretary.

MARLBORO COUNTY.

Blenheim.—W. J. Atkinson, Secretary.

Clio.—Dr. J. A. Woodley, Secretary; W. A. Henshaw, W. C. Smith, John W. Welch,
S. L. Stanton.

Bennettsville.—Dr. W. J. Crosland, President; T. C. Weatherly, R. T. Barfield;
T. W. Bolton, Secretary.

NEWBERRY COUNTY.

Newberry.—P. G. Ellison, Chairman; E. Cabaniss, Secretary.

Little Mountain.—Dr. John M. Sease.

Prosperity.—Dr. A. F. Langford, President; B. L. Darmick, J. B. Fellers, H. S.
Boozar, Francis Bobb.

Township No. 2.—B. F. Cannon; Dr. G. B. Caldwell, Secretary.

Township No. 9.—Dr. J. J. Dominick, Secretary.

OCONEE COUNTY.

Walhalla.—R. F. Joynes, Secretary; S. N. Pitchford; Dr. D. B. Darby, President;
B. R. Westmoreland, Dr. J. J. Bell.

Seneca.—Dr. J. B. Brown, President; B. F. Sloan, Secretary; Dr. G. L. Martin,
M. W. Coleman, O. F. Bacon.

Clemson College.—Dr. Redfearn, Dr. P. H. E. Sloan, T. Q. Donaldson, W. L. McGee.
Westminster.—J. W. Quillian, M. D.; A. Zimmerman, Secretary; B. H. Cross.

ORANGEBURG COUNTY.

Elloree.—A. L. Singletary.

Livingston.—Dr. Thomas J. Pou, Chairman; J. C. Wooley; J. W. Gantt, Secretary; A. E. Jernigan.

Norway.—Dr. R. R. Stephens; C. H. Able, Secretary.

North.—Dr. T. F. Williams, Secretary.

Orangeburg.—L. H. Wannamaker.

Fort Motte.—Dr. W. W. Wolfe, President; G. W. Killard, Thomas I. Hopkins, John D. Maynard; David Christie, Secretary.

Woodford.—Dr. J. M. Davis, S. W. Livingston, Joseph Wingard, I. R. Dissenganner, S. J. Dernow.

Vance.—E. I. Dantzler, Dr. W. H. Lawton, Dr. J. Avinger, A. P. Avinger, Jr., J. L. Banister.

Branchville.—J. Katresh, President; Dr. W. L. Reeves, Secretary; W. C. Crum, H. O.; W. P. Dukes, W. L. Dukes, W. L. Wolfe.

Rowesville.—Dr. A. O. Bowman, Chairman; W. L. Wolfe; W. P. Dukes, Secretary; M. F. Dukes.

St. Stephens.—Dr. A. R. Able, Secretary.

PICKENS COUNTY.

Liberty.—W. A. Sheldon, Secretary; Dr. J. J. Wakelin, W. H. Chapman, L. O. Skelton; F. N. Hunter, President.

Easley.—H. E. Russell, Chairman; W. A. Mauldin, B. C. Johnson, J. T. Lathem; Dr. C. W. Wyatt, Secretary.

Fort Hill.—Dr. A. E. Hines, W. L. Poore, E. T. Lovell.

Calhoun.—P. T. Dillard, Secretary.

RICHLAND COUNTY.

Columbia.—Dr. Robert W. Gibbes, Dr. W. K. Griffith, C. F. Hoefer, J. C. Robertson, F. VanBenthuyzen, Dr. A. E. Boozer, J. L., Casey, O. E. Thomas, Edward Ehrlich, John A. Jennings, Dr. L. B. Owens, H. J. Hennies, Alonzo Monckton, R. McDougall, J. G. Graham; T. T. Talley, Secretary.

SALUDA COUNTY.

Mt. Willing.—Dr. J. J. Buster.

Saluda.—J. J. Buster, Secretary; W. E. Black, T. B. Holly, T. E. Dowling, Chairman.

SPARTANBURG COUNTY.

Cowpens.—Dr. Charles Sims, W. H. Wheat, W. O. Turner, D. S. Lipscomb, E. Potter.

Enoree.—Dr. J. H. Allen, President; J. F. Matthews, R. L. Walker, F. Engels, E. B.

Huff; Rev. J. M. Friday, Secretary.

Woodruff.—B. S. Beason, T. W. Cox; E. G. Floyd, Secretary; Dr. S. A. Wideman.

Spartanburg.—Henry Heintish, Secretary.

Landrum.—Dr. J. W. Campbell, R. A. Clinton.

Inman.—Dr. W. J. Wall, D. B. Canady, A. W. Ballenger; Dr. J. R. Gibson, Chairman; W. A. Hart, Secretary.

Reidville.—Dr. W. A. Harrison, E. R. Thackston.

Switzer.—Thomas W. Collier, Secretary; Martin Mitchell, W. G. Waldrop.

Rodman.—Dr. R. L. Douglass, Secretary.

SUMTER COUNTY.

Mayesville.—W. M. Bradley, Chairman; Dr. C. E. King, T. W. Bradley, M. V. Izlar, W. D. Mayes, W. J. McLeod; T. M. McCutchen, Secretary.

Sumter.—E. J. Beardon, Secretary; Dr. H. M. Stuckey, President; W. M. Graham, Dr. S. C. Baker, D. W. Cuttino, L. J. Spann.

Pinewood.—Dr. P. M. Tally, Intendant; R. F. Epperson, Secretary; Dr. D. M. Murray, H. F. Stack, A. W. Griffin, P. H. Broughton.

UNION COUNTY.

Union.—A. W. Greene, W. T. Thompson, W. M. Meadow, H. Grimball; Dr. M. W. Culp, Secretary; A. H. Foster.

Carlisle.—J. G. Rice, Secretary; M. R. Jeter, W. H. Gist, Dr. J. T. Hancock, M. O. Ward.

Jonesville.—Dr. W. O. Southard, Secretary; Dr. K. M. Littlejohn, Dr. H. L. Harris, F. P. O. Shields, J. F. Ahnon.

Kelton.—L. J. Wood, Secretary.

WILLIAMSBURG COUNTY.

Scranton.—W. J. Sturgion, Secretary; W. J. Willoughby, J. M. Kirby.

Lake City.—Dr. Thad B. Hinnant, John J. Morris, H. H. Singletary, John A. Green; John L. Stucky, Secretary.

Cades.—E. R. Wilson, M. D.

YORK COUNTY.

Blacksburg.—Dr. J. G. Black, President; W. M. Freeman; Dr. D. S. Ransom, Secretary; A. M. Bridges, W. M. Anderson, W. A. Barber.

Fort Mill.—Dr. T. B. Meacham, S. E. White, L. N. Culp, L. J. Massey, Sol. M. Spriggs.

Yorkville.—Dr. W. M. Love, A. W. Gladden, J. F. Ashe.

Clover.—Dr. J. W. Campbell.

Rock Hill.—T. L. Johnson, President; J. Simpson, A. D. Holler, Dr. J. R. Miller, Maj. A. H. White; W. J. Caveny, Secretary.

Guthriesville.—Dr. W. M. Love, Secretary.

Receipts and Expenditures of the State Board of Health.

EMERGENCY FUND.

State Board of Health in Account with Dr. James Evans.

1906					
Jan.	3.	To amount paid	Western Union Telegraph Company	\$	6 58
Feb.	3.	To amount paid	Western Union Telegraph Company		9 26
	3.	To amount paid	Daggett Printing Company		52 75
March	5.	To amount paid	Western Union Telegraph Company		8 37
	5.	To amount paid	H. G. Mulford Company		843 00
	8.	To amount paid	Dr. G. R. Dean, postage		15 50
April	4.	To amount paid	Western Union Telegraph Company		6 27
May	5.	To amount paid	Western Union Telegraph Company		3 98
	5.	To amount paid	Dr. G. R. Dean, clerk		100 00
July	6.	To amount paid	Western Union Telegraph Company		2 15
	22.	To amount paid	H. K. Mulford Company		642 85
Sept.	30.	To amount paid	Western Union Telegraph Company		2 04
Oct.	8.	To amount paid	Dr. G. R. Dean, clerk		200 00
	8.	To amount paid	Dr. G. R. Dean, postage		6 50
Nov.	10.	To amount paid	Western Union Telegraph Company		1 95
	13.	To amount paid	Dr. W. E. Sparkman, vaccine		4 27
Dec.	3.	To amount paid	Western Union Telegraph Company		4 83
Nov.	30.	To amount paid	H. K. Mulford Company		450 00
April	24.	To amount paid	Dr. G. R. Dean, to Charleston		54 00
Nov.	24.	To amount paid	Dr. G. R. Dean, to Columbia		31 00
Dec.	25.	To amount paid	Dr. G. R. Dean, to Kershaw		34 80
	12.	To amount paid	Dr. G. R. Dean, telegrams		6 50
	12.	To amount paid	Dr. G. R. Dean, printing		9 25
	12.	To amount paid	Dr. G. R. Dean, postage		9 50
	12.	To amount paid	Dr. G. R. Dean, stationery		4 00
	12.	To amount paid	Dr. G. R. Dean, clerk's salary		200 00
					<u>\$2,702 10</u>

CREDIT.

1906.					
March	10.	By amount received from	Comptroller-General	\$	935 46
Nov.	5.	By amount received from	Comptroller-General		953 54
Dec.	15.	By amount received from	Comptroller-General		812 80
					<u>\$2,702 10</u>

QUARANTINE FUND.

State of South Carolina Quarantine in Account with Dr. James Evans.

1906.					
Jan.		To amount paid	Marine Sanitary Commission	\$	162 50
		To amount paid	Dr. J. W. Folk		37 50
Feb.		To amount paid	Marine Sanitary Commission		162 50
		To amount paid	Dr. J. W. Folk		43 35
April		To amount paid	Fire Insurance, at Georgetown		16 20
	6.	To amount paid	Marine Sanitary Commission, for March		162 50
	6.	To amount paid	one-quarter quarterly, appropriation		250 00
	6.	To amount paid	Dr. J. Folk		50 00
	6.	To amount paid	Dr. J. W. Folk, boat hire		50 00
	9.	To amount paid	News and Courier, printing quar.		10 60
	9.	To amount paid	Palmetto Post, printing quar.		6 00
	9.	To amount paid	Georgetown paper		10 00
May	23.	To amount paid	Marine Sanitary Commission, for April		162 50
	23.	To amount paid	Dr. J. W. Folk, for April		50 00
June	21.	To amount paid	Beaufort Gazette, printing quar.		5 80
July	6.	To amount paid	Marine Sanitary Commission, for May and June		325 00
	6.	To amount paid	Marine Sanitary Commission, one-quarter appropriation		250 00
	6.	To amount paid	Dr. J. W. Folk, for May and June		100 00
	6.	To amount paid	Dr. J. W. Folk, boat hire		37 50
Aug.	14.	To amount paid	Marine Sanitary Commission, for July		162 50
	14.	To amount paid	Dr. J. W. Folk, for July		37 50
Sept.	11.	To amount paid	Marine Sanitary Commission, for August		162 50
	11.	To amount paid	Dr. J. W. Folk, for August		50 00
Oct.	15.	To amount paid	Marine Sanitary Commission, for September		162 50
	15.	To amount paid	Marine Sanitary Commission, one-quarter appropriation		250 00
	15.	To amount paid	Dr. J. W. Folk, for September		50 00
	15.	To amount paid	Dr. J. W. Folk, boat hire		37 50
					<u>\$2,803 45</u>

CREDIT.

1906.			
March	23.	Received from Comptroller-General, for Jan. and Feb.	\$ 421 05
April		Received from Comptroller-General, for March	539 10
May		Received from Comptroller-General, for April	212 50
July		Received from Comptroller-General, for May and June	718 30
Aug.		Received from Comptroller-General, for July	200 00
Sept.		Received from Comptroller-General, for August	212 50
Oct.		Received from Comptroller-General, for September	500 00
			<hr/>
			\$2,803 45

EMERGENCY FUND.

State Board of Health in Account with Dr. James Evans.

1906.			
Jan.	30.	To amount paid for postage	\$ 4 36
	30.	To amount paid for salary	41 66 $\frac{2}{3}$
Feb.	28.	To amount paid for postage	4 64
	28.	To amount paid for salary	41 66 $\frac{2}{3}$
	28.	To amount paid for office rent, Jan. and Feb.	8 33 $\frac{1}{3}$
	15.	To amount paid Dr. T. G. Simons, to Legislature	34 00
	15.	To amount paid Dr. G. R. Dean, to Legislature	22 80
	15.	To amount paid Dr. Jas. Evans, to Legislature	28 40
	25.	To amount paid Columbia State, printing Annual Report	291 18
March	8.	To amount paid Dr. T. G. Simons, meeting in Columbia	34 00
	8.	To amount paid Dr. C. M. Rees, meeting in Columbia	34 00
	8.	To amount paid Dr. R. M. Wilson, meeting in Columbia	34 00
	8.	To amount paid Dr. W. H. Nardin, meeting in Columbia	37 40
	8.	To amount paid Dr. G. R. Dean, meeting in Columbia	46 80
	8.	To amount paid Dr. Jas. Evans, meeting in Columbia	28 40
	27.	To amount paid for postage	4 64
	31.	To amount paid for salary	41 66 $\frac{2}{3}$
	31.	To amount paid for office rent	8 33 $\frac{1}{3}$
April	17.	To amount paid Dr. T. G. Simons, meeting in Columbia	42 00
	17.	To amount paid Dr. Jas. Evans, meeting in Columbia	32 40
	17.	To amount paid Dr. C. M. Rees, meeting in Columbia	42 00
	17.	To amount paid Dr. W. H. Nardin, meeting in Columbia	41 40
	17.	To amount paid Dr. A. A. Moore, meeting in Columbia	18 60
	17.	To amount paid Dr. G. R. Dean, meeting in Columbia	35 20
	24.	To amount paid for postage	4 64
	30.	To amount paid for salary	41 66 $\frac{2}{3}$
	30.	To amount paid for office rent	8 33 $\frac{1}{3}$
May	18.	To amount paid for postage	5 17
	25.	To amount paid for postage	41 66 $\frac{2}{3}$
	31.	To amount paid for salary	4 64
June	25.	To amount paid for postage	41 66 $\frac{2}{3}$
	30.	To amount paid for salary	16 66 $\frac{2}{3}$
	30.	To amount paid for office rent, May and June	1 14
July	6.	To amount paid for postage and postoffice box	5 00
	28.	To amount paid for postage	41 66 $\frac{2}{3}$
	31.	To amount paid for salary	8 33 $\frac{1}{3}$
	31.	To amount paid for office rent	5 42
Aug.	21.	To amount paid for postage	41 66 $\frac{2}{3}$
	31.	To amount paid for salary	8 33 $\frac{1}{3}$
	31.	To amount paid for office rent	5 17
Sept.	20.	To amount paid for postage	41 66 $\frac{2}{3}$
	30.	To amount paid for salary	8 33 $\frac{1}{3}$
	30.	To amount paid for office rent	34 00
Oct.	8.	To amount paid Dr. T. G. Simons, meeting in Columbia	34 00
	8.	To amount paid Dr. R. M. Wilson, Jr., meeting in Columbia	36 80
	8.	To amount paid Dr. G. R. Dean, meeting in Columbia	37 20
	8.	To amount paid Dr. A. A. Moore, meeting in Columbia	14 60
	8.	To amount paid Dr. Jas. Evans, meeting in Columbia	28 40
	8.	To amount paid Dr. W. H. Nardin, Penal and Charitable Institutions	32 90
	8.	To amount paid Dr. T. G. Simons, meeting in Columbia	2 24
	15.	To amount paid Columbia State, printing	3 30
	15.	To amount paid News and Courier, printing	1 50
	15.	To amount paid Spartanburg Herald, printing	3 33
	15.	To amount paid for postage	4 64
	29.	To amount paid for postage	41 66 $\frac{2}{3}$
	31.	To amount paid for salary	26 90
Nov.	20.	To amount paid Florence Times, printing	5 17
	25.	To amount paid for postage	41 66 $\frac{2}{3}$
	30.	To amount paid for salary	

Dec.	10.	To amount paid for printing Notary Certificates	1 00
	8.	To amount paid Dr. T. G. Simons, postage	5 00
	8.	To amount paid T. G. Simons, postage	5 00
	8.	To amount paid Dr. T. G. Simons, visit to Columbia to In-	
		spect typhoid conditions	34 00
	8.	To amount paid Dr. R. M. Wilson, Jr., meeting in Cola...	34 00
	8.	To amount paid Dr. G. R. Dean, meeting in Columbia...	35 40
	8.	To amount paid Dr. A. A. Moore, meeting in Columbia...	18 60
	8.	To amount paid Dr. W. H. Nardin	37 20
	8.	To amount paid Dr. Jas. Evans	28 40
	25.	To amount paid for postage	4 64
	31.	To amount paid for salary	41 66 ² / ₃
	31.	To amount paid for office rent, Oct. Nov. and Dec.	25 00
	31.	To amount paid Walker, Evans and Cogswell	5 00
			<hr/>
			\$1,967 96
Balance of \$2,200.00.. .. .			\$ 232 04

CREDIT.

1906.			
March	31.	Received from Comptroller-General.....	\$ 590 98
April	30.	Received from Comptroller-General.....	218 28
	30.	Received from Comptroller-General.....	211 60
July	15.	Received from Comptroller-General.....	110 17
Oct.	8.	Received from Comptroller-General.....	237 90
	22.	Received from Comptroller-General.....	166 73
	11.	Received from Comptroller-General.....	205 70
Dec.	15.	Received from Comptroller-General.....	226 60
			<hr/>
			\$1,967 96

Annual Report, Department of Health of the City of Charleston, S. C.

REPORT OF HEALTH OFFICER.

Charleston, S. C., January 1st, 1906.

Department of Health.

To the Honorable the Mayor, and Aldermen.

Gentlemen: I have the honor to submit this my annual report, together with the meteorological observations and tables of vital statistics and other proceedings of this department which have been undertaken for the general benefit of the city during the year 1905.

SANITARY INSPECTORS.

The four sanitary inspectors have been faithful and diligent in their work. They visit fifty premises per day, weather permitting, and require that they be kept clean; that garbage be removed as per city requirements; that drains be kept open and clean, and that privy vaults be disinfected and cleaned as often as required, by the licensed vidangeurs, and to report all leaking hydrants.

Their duties are responsible and arduous. They make reports daily to the Health Officer, and weekly they summarize the work of the week; each inspector shows the work done, the number of premises visited, the number of vaults; drains, etc., that have been cleaned out and repaired, and the number of yards that have been cleaned and put in sanitary condition, with the signatures of such parties visited, so as to verify their own written reports and statements.

The sanitary inspectors for the year 1905 were:

Gilman Courtenay, District No. 1.

A. Waring Mitchell, District No. 2.

Mike Hogan, District No. 3.

D. Pinckney Johnstone, District No. 4.

F. S. Nipson, Health Detective.

ABATTOIR.

The establishment of an abattoir by the city has been urgently and eloquently recommended by my predecessors, Drs. Horlbeck

and Green, and I most heartily concur in all that they have said as to the necessity of such an establishment in their annual reports for the last twenty years.

And this is only the substantiation and the acclamation of the judgment of economists and sanitarians throughout the civilized world. It is a disgrace and an outrage that we should allow butcher pens and slaughter houses to be in the city.

For the benefit of the few, the many are made to suffer. The offense arising from one of these pens is unspeakably offensive to all our five senses, to say nothing of the millions of flies that are bred by these pens, and infest the neighborhood; and no man should be allowed to thus impose upon his fellows. And the cruelty to poor, helpless, dumb animals, kept in such noisome, noxious bog holes, as these pens are, is monstrous, and should appeal to the humane sentiment of the community, if not to the health and comfort of our fellowman.

These butcher pens should be run out of the town, hot and fast, and there be left no vestige of them. Man and beast cannot live together.

An abattoir should be established outside the remote city limits, and on high dry ground, where all animals intended for slaughter should be kept, and kindly cared for, until their day of ultimate disposal, when their final translation from this "fitful state called life" should be accomplished expeditiously and with as little pain as possible. A beef steak treated that way one would relish; treated as they now are, you do not wish to set eyes on one; they are all scruff and tough and gristle and waste and bone, and are not fit to appear on any man's table. You would not like to touch one with a ten-foot pole.

Associated with the abattoir there should be an educated and competent and honest veterinary surgeon and inspector of all animals on the hoof, and after being dressed and offered for consumption. There should also be refrigerators on the premises.

Properly managed, such an establishment would prove itself a great accessory to the comfort and health of our citizens, and a source of income to the city or to such other parties as may undertake the enterprise. And I think the butchers themselves would be glad to have an abattoir under such management, and thus not be subject to the constant harassments and complaints made by our sanitary inspectors and health officer, with threats of legal prosecutions.

COW LOTS.

As to offensiveness, cow lots are to be put in the same category as butcher pens. The two are "much of a muchness". They both are offensive to one's neighbors; they both breed flies, and flies, like mosquitoes, breed and transmit disease.

By the last count made, there are 434 cows in the city; shut up, in most cases, in filthy pens, and cramped in small sheds and narrow stalls, they can hardly produce wholesome milk. The voidings of a cow are so profuse and pervasive that it is practically impossible to keep a cow-yard "sweet and clean", as the requirements, under ordinance, demand; and the breathing and rebreathing of such airs and of their own expirations and emanations must impart similar properties to the milk, and make it to that degree unfit, especially for infants.

There should not be allowed to be kept more than one or two cows, at the most, on a lot, and this for the use of infants and invalids and delicate digestions, the presumption being that the animals may be given fresh air and space to exercise, the number being thus limited, and the premises may be kept in better sanitary condition, and the animal in health, and the milk product be thus sound and wholesome.

I am sorry to have to speak thus, for some of my best friends are keepers of cows; and, in some cases, in part at least, it is their dependence and source of income, but personal friendships, in my official capacity, must give place to the public good.

As of cattle and meats, there should also be an Inspector of milch cows and milk. The one officer, if properly qualified, could accomplish the duties of the two offices.

LOW LOTS, ETC.

As to low lots and low parts of the city, I hardly know what to say—they have been here long before any one of us was born; in fact, no doubt, before Columbus discovered this continent in 1492. They have outstayed our predecessors, and they will likely outstay all of us now here present on this "Terrestrial Ball."

But the greater the obstacle, the greater must be the purpose to overcome it.

An immense amount of work has been done in years gone by in filling and draining, by private enterprise and by municipal accomplishment, and even within the short period of our own recollection, and such work is now going on, perceptibly, day by day, so that

the city in all its eastern and western sections (the only low parts) presents today a totally different aspect from what it did twenty or thirty years ago.

As soon as the city puts on a more active growth, as at present it is doing, all these low lots will become of such value that they will be possessed by people of means and energy, and then you will see them filled up and covered by beautiful verdure, and occupied by handsome residences, tenanted by wealthy and progressive people, and this day is not far distant. The climate and the site and the opportunities and our beautiful, deep and spacious harbor and our navy yard, are too patent to escape observation much longer.

In the meantime the city, like a good mother, should take care of her citizens, and help fill up these outlying low properties. The chief difficulty in this case is the want of filling material. Let the city bring in by railroad, from five to ten miles distant, clean, virgin earth, and deliver it on rails laid temporarily on the open streets, and furnish such earth where needed, at its actual cost, and then you can compel owners to fill their lots, and there will be an impulse and a rivalry given to such most needful work.

As it is now, the people are required to fill lots, they having no material with which to do it. As was the case with the Hebrews in Egypt some time ago, they were required to "make bricks without straw," and they could not do it.

But some narrow head or shallow pate will say, why should the city help the lone individual: not having the breadth or foresight to see that what helps the individual helps the mass, and the contrary. Does not the city build streets and parks, and lights and structures, and all use these things, and yet not one in four score helps to pay the cost? Is the city to be deterred from such works by reason of such facts? Surely not.

The city should supply fit material for filling lots and vaults and cesspools, and then she could compel the observance of the ordinances in this matter.

Located, as we are, on two bold salt water rivers, the baleful effects of such places is greatly abated by the inflow and outflow of salt water twice daily, but by no means wholly corrected, and there can be no use made of such places so long as they are subject to water, be it salt or fresh or brackish.

It would redound greatly to the health and wealth of the city to have these low places and pestiferous cesspools and vaults filled up, and there would thus be abundant and superabundant return made to the city for any output she may make to this end.

But, alas, some will say, we shall then no longer hear the sweet music of the *Stegomyia* "filing his bill" in the marshes; or of the tuneful frog singing his melodious psalms in the quagmires.

And the *Culex*, what will we do for diversion without him in the dead hours of the night? That jolly cuss, exclude him. Never!

CISTERNs.

Until of comparatively recent times, say fifty to one hundred years, all communities, on this hemisphere at least, were without other water supply than that afforded by springs, surface wells and cisterns. And it was so with Charleston.

Typhus and typhoid fevers were then hardly known here in this city. They were accounted as of the up country, and even of the mountains, where surface conditions, as to water, and slovenly practices as to hygiene, were supposed to obtain, the cistern being the conservator of health.

Up to 1871 yellow fever, (that scourge) was not of unusual contentions are not yet without (each hypothesis) its advocates? physical conditions, or epidemic, as by importation, was then hotly contested by the most learned local and foreign authorities, and such contentions are not yet without, (each hypothesis) its advocates; for it will occur to even the ordinary non-professional mind that if mosquitoes are the sole originators of yellow fever and of malarial fever, how did the first case of these fevers originate (how did the first mosquito get his first bite and blood)? They must have been self originative; and, if so, then why not so now? The mosquito theory, therefore *in its exclusiveness*, is a reduction-absurdum.

And, if cistern or well water injected are the causes of typhus and typhoid fevers, etc., how is it that of parties, living in the same house and drinking the same water, the one will have the fever and the other not? It goes to show that all these zymotic diseases are in a measure, under conditions, self generative, quite as much of inside inception as of outside suggestion, each individual having his own susceptibilities or idiosyncrasies, as in the domains of mind and morals.

Now to the concrete, and as to cistern water:

There is no reason why cistern water should not be potable and wholesome, and there is every reason why it should be potable and wholesome. We will throw aside the first proposition; for if the second is demonstrable, the first is negatived.

I will premise by saying that the cistern must be clean and tight, and that it must be attended by one party only, and that party must be heedful and intelligent. Such party will keep the intake gutter constantly turned off, so that light rains and drippings and seepings from the roof do not enter the cistern, loaded, as such drippings are, with microbes and all the foul elements that may be floating in the air, or resident on the roof; for it is these things, coming from the fine dust of the streets, tritruated by heel and wheel into impalpable powder that go to pollute the water. This dust is full of fine particles of excreta of animals, of the dried and floating sputa of men, and of effete and rotten animal and vegetable matter, of the pollen of trees, and other agencies full of microscopic animalculæ and germs of lower life, developing into bacilli, bacteria, microbes, and what not; that, entering into the system, develop and declare themselves in the establishment of typhus, typhoid, scarlet fevers, tuberculosis, and other low orders of disease. Such agencies should not be taken into the stomach or into the lungs, or they will work harm.

These deleterious concomitants are not inherent in rain water, they are accidental to it. Do not suffer the water to enter the cistern until there has been a hard driving rain for at least one hour or longer, and then you will have pure rain water in your cistern, suitable for all purposes, and coming direct from the heavens, it can contain no impurities. It is practically pure H. O., chemically hydrogen and oxygen; and, passing through the air, it appropriates life-giving and exhilarating gases and subtle agencies and principles—nitrogen and oxygen and ozone, galvanism and electricity, that make one feel like living and doing, whether inhaled as tonic air, or imbibed as wholesome water.

The chemist can find no impurities, as so called, in pure rain water. It only becomes impure when polluted, as above described, and received into foul cisterns.

“Ho! Everyone that thirsteth, come ye to the waters.”

“Our fathers drank this water,” and they lived to good old age. We drink it and we live.

Only do not make the water bad, and then declare that it is bad.

All cisterns should be well ventilated, and all openings should be screened with fine wire gauze, to keep out mosquitoes and other insects, etc.

Even when the cistern is full and overflowing, keep on taking in water whenever and so long as there is a good, clean rain falling; it goes to renew and revivify the old water in the cistern.

WATER.

There is no subject to which a city should give more attention than to that of water.

Water should be pure and in abundance, enough to use lavishly, and even to waste; only so that the drainage and sewerage be competent to carry it and its contents off with force and rapidity, and deliver it into one of the two rivers, Ashley or Cooper. A city of this size, say 65,000 inhabitants, requires at least 10,000,000 to 20,000,000 gallons per twenty-four hours; that is if the same water is to be used for all purposes of drinking, cooking, bathing, washing, watering streets and gardens, flushing water closets, private and street drains, and for fire purposes: 10 million gallons would furnish at the rate of about 150 gallons per capita; and if the same water is to be used for all the above purposes, as at present, this supply will be found to be not in excess of requirements, even allowing the continued use of cisterns and open wells, as at present. The larger cities of the United States are now using from 200 to 400 gallons per capita per day.

Under present contract with the water company, we are entitled to 5,000,000 gallons per day, (and on fire and other occasions 8,000,000 gallons per day), at the pressure of fifty pounds, say 76 gallons per day per capita. The water company has not been called upon, so I am informed, by the demands made upon it, so far, to supply more than 2,500,000 gallons per day. Suppose that the water company was required to supply the contract amount, 5,000,000 gallons per day, would it be able to do so the whole year round, year after year? I wot not. The ordinances now require that all privy vaults south of Broad street be filled, and that water closets be substituted, with direct delivery into the street drains. It is safe, presumably, to say that not more than one-fourth of such premises have now such connections made, to the exclusion of the privy vaults. Suppose that this ordinance be put into full force, there would be about, say, three or four times as much water required south of Broad street as there is now being used. According to the City Directory, there are about 8,000 premises in the city, and Dr. Horlbeck computed that there are 12,000 privy vaults. It is presumably safe to say that not more than one-fourth of this number have water connections, as required by ordinance, or in fact any city water connections. It is the avowed purpose of the city council to sooner or later enforce this ordinance as to the occlusion of privy vaults throughout the entire city, and to compel the delivery of such and

other matters contained, into the street drains, thence to be forcibly flushed into the ocean; there will then be required at least four times as much water as is now being supplied, say, 2,500,000 by 4 equals 10,000,000. It is, indeed, safe to say that at least 20,000,000 will be required, or more, likely 40,000,000, if used for all the above mentioned purposes.

Facts are stubborn things, and cannot successfully be combatted or evaded, nor can they be averted by shutting one's eyes to them.

For all domestic and household purposes the Goose Creek water is good, that is it is good enough; and, if used only for such purposes, it is in sufficient quantities for present requirements. Those who do not like to drink Goose Creek water can drink some other water, or else drink some other thing. What I wish to arrive at is this: That the present supply of water is inadequate to the demands that will ultimately be made upon it. As this supply cannot be increased, finding ourselves on a wrong road, let us go no further on this road; but let us cast about for other and more abundant and more available supply of water.

We find it at our very doors, in exhaustless quantities, in the mighty Atlantic ocean; water, that for such purposes as flushing drains there can be found none so good. It is salt, heavy, depuratory, aseptic, antiseptic and corrective.

We are like the man in the fable, that traveled around the world, and dug to great depths in search of gold and precious stones, that upon returning home, worn out and penniless, he found in abundance in a stream running through his own garden.

If we can drive water from Goose Creek, fifteen miles distant, perpendicularly into the tops of the highest houses in the city, why is it that we cannot drive water from the Atlantic ocean, right at our doors, horizontally, through the open drains of the cities, at all hours of the twenty-four, at such force as to expel everything out of the drains throughout the entire length and breadth of the city into the ocean? It is not proposed to drive the salt water up into our houses, but through the present drains and others that must be built. It is entirely practicable to do so, as I am sure even any journeyman mechanic will tell you. It will cost time and money, but can anything be done without time and money? And have not our previous ventures in water and sewerage cost time and money, and have they not proven only partially satisfactory?

We could prosecute this work gradually, beginning with longitudinal streets, Meeting and King, etc. I am sure it would prove

a successful and lasting solution of this most difficult municipal problem.

We should think ourselves greatly blessed in being on the very shores of the salubrious Atlantic, with broad, beautiful, clean, salt water rivers on either side of us, and we should not cast aside or despise these natural advantages. By the utilization of them, we would add greatly to the health and comfort and wealth of the city.

There is absolutely no excuse for the filthy condition of our drains, their utter inadequacy to do the work required of them, and the consequent necessity for the present mode of relieving them of the disgusting accumulations in them. The drains of the city cannot possibly be relieved of their contents by the present sluggish, almost stagnant method of flow and ebb by ingress and egress of the tides. Such proportion of the mass as may be fluid, or as may go into solution, may be carried off imperfectly, but the great bulk of such stuff can only be carried off in a state of suspension in the water, and when the flow becomes sluggish or nil, this mass deposits itself, and there remains and becomes obstructive, until by constant daily, hourly accumulations, it finally occludes the drain, and so chokes it that it can no longer discharge its work; and then, after being in this state an indefinite time, it has to undergo this so-called cleaning, by the forcible uplifting of its contents to the surface of the street, and thence its removal by open carts, greatly to the offense of all passers by.

Strange to say, however, as obnoxious as this stuff is to one's senses of smell and sight, upon being hauled away and put on the open surface, exposed to air and rain and sun, it does not seem to originate or disseminate disease; but, on the contrary, becomes inoffensive, and serves as an available material for filling low lots, its character discovering itself as being largely the washings of sand and silt from the surface of the streets. In fact, large proportions of the city streets and parks and private lots have been filled with this stuff, and made suitable for building purposes, and this is better than having the cesspools and disease and mosquito breeding places that existed prior.

While on the subject of water, I will say that there should be double or treble or quadruple the present number of public hydrants and water troughs in the open streets, for the use of man and beast. It would add greatly to the health and comfort of the city. But there should be a drain immediately under each such outlet, so that there be no water or slops left standing on the streets.

PRIVY VAULTS.

These horrible vaults are nasty and obnoxious in the extreme. The late Dr. Horlbeck wrestled with them, and he reckoned that there were 12,000 such places in the city; they have been here since the founding of the city in 1670, and no doubt before, and they are all here now; the people are complaining daily, and justly so, to the Health Officer in most grieved and not always in very polite language, about these most loathsome places, as if he had originated and was engaged in propagating them. Not so, for they are so insufferable that even he himself has to flee to the mountains to get away from them.

But let us not despair, for the Board of Health is fully aware of these conditions; and, if the city will do her part, we will moderate and ultimately eradicate these and other offensive and mosquito and disease breeding pest places.

The chief difficulty in this case is that no contrivance has been devised by which to remove this stuff from the pits. Suction cannot do it, for all kinds of foreign things are thrown into the pits, such as garbage, dead rats, cats and dogs, and even sometimes, so I am told, negro babies are found. Such things go to obstruct the pipes (8 inches in diameter) and hinder the working of the valves.

But all this will be overcome in the near future, for "where there is a will there is a way", and you can depend upon man to surmount, or crawl under, or circumvent any difficulties that obstruct his purposes.

Another prime objection to these privies is that they pollute the waters of wells and cisterns, and thus introduce into the human system diseases of the most malignant types, such as typhoid, etc.

The vidanguers, or men engaged in this work, are at it whenever the weather permits, and they keep up fairly well with orders given them daily, or complaints made at the health office for the Sanitary Inspectors, or by private individuals.

CEMETERIES.

Complaints having been made from time to time about the cemeteries in the city, and especially those for colored people, and the matter having been referred by city council to the health department, and by them to the health officer, it seems in place to say something here.

These are the cemeteries chiefly in question :

Bethsheba.

Calvary Episcopal.

Colored Catholic.

Colored Lutheran.

Colored Scotch.

Ephrata.

Field of Rest.

McPhela.

Brandts or Wysinger's Farm.

Brown Fellowship.

Colored Bethel.

Mitchels Ground.

They are all here by sanction of the city ; they have been incorporated and chartered, and continue to exist under the same conditions and restrictions as do other cemeteries in the city.

I have personally visited these cemeteries, and find them to be in substantially good condition, and burials to be conducted decently and agreeably to the ordinances.

Five of the above cemeteries are practically closed just as are the cemeteries for whites, by reason of few or no interments made in them for years past ; and two others with interments of only eleven or twelve. The four largest, as to space of ground and number of interments, are the Bethsheba Cemetery, Colored Lutheran, Colored Scotch, Field of Rest (Methodist). I have visited these four cemeteries especially, several times, and twice with Health Detective Nipson, and once with Sanitary Inspector Hogan, carrying along each time my ten-foot steel probing rod, and I found the graves of infants to be four and one-half feet, and of adults five to six feet to the top of the coffin, showing a depth of the graves to be about one foot deeper. There was no reason to suppose that more than one body had been put in one grave. And there is plenty of room for more interments in each of these lots.

These colored people are among our most respectable people and are useful citizens ; they are aware of the requirements of the law, and they can be depended upon to obey it, and to observe order and decency.

As to the cemeteries throughout the city, they are largely abandoned as such, and in the next generation they will, likely, be wholly abandoned for grounds outside the city.

They stand now, to a degree, in some sense, as parks, affording breathing places for live stock and resting places for dead people.

In the meantime, the Health Department will see that they are kept according to law.

YELLOW FEVER.

We had reason to be alarmed last summer as to a possible invasion of yellow fever. This dread disease appeared in New Orleans last May 13, but was not certainly recognized or at least was not officially announced until July 13, two months later. Our Board of Health, ever on the alert, (with our honorable Mayor and city council in full accord,) appreciated the danger of its invasion; and to avert so dire a calamity, they at once organized and put into practice a most thorough system of sanitation and disinfecting, and quarantine regulations by land and sea. They doubled and redoubled the forces and agencies theretofore being used. The regular force of four white Sanitary Inspectors for the whole city was increased to twelve white Sanitary Inspectors, and twelve negro assistants, making the force twenty-four instead of four. An additional cart for distribution of liquid disinfectants (copperas and chloride of lime) was employed, making two such carts at work and a cart to distribute quick lime. These three carts did efficient service, answering all calls promptly, and, besides, such places as were indicated by the Sanitary Inspectors, such as privy vaults, cesspools, low and offensive places.

Besides the above work, directed by them, these twenty-four Inspectors made a thorough house to house inspection of all premises in their respective districts, demanding that all vaults requiring it be emptied, and all low places and all drains be disinfected and rendered inoffensive and sanitary by the liberal use of the copperas and lime mixture, quick lime, chloride of lime and phenol and formaldehyde, where needed.

They also required that all garbage be removed on days specified by the city, and that all rubbish, and all tin cans, or other receptacles that might hold water, and that all grass and weeds on private premises, church yards, vacant lots, etc.; be cut down and placed on the streets for early removal by the city carts. These twenty-four Inspectors were also required to put kerosene oil in all cisterns, vaults, drains, and all cesspools and low places, or wherever water might lie, and become offensive, and breed mosquitoes. They were also required to put fine wire screens over all entrances to cisterns, to all water barrels, etc.

These Inspectors did an immense amount of work, and in as thorough a manner as could be done in the limited time in which they

were at work, from August 3rd to August 31, making twenty-five working days, and they should be highly commended, and substantially rewarded, as the pay given them was only \$1.50 a day for whites, and \$1.00 for blacks, a hard, hot and disagreeable service. No one can tell to what extent, if not wholly, was due our escape from yellow fever to these extra men, for the twenty-five days, and of course to the four regular Sanitary Inspectors, for their faithful and intelligent service, in directing and aiding in this work.

It was indeed a Herculean labor, like cleaning out the Augean stables of old, which could only be done by Hercules.

The City has probably had not so thorough a cleaning in all its parts since the yellow fever scares in 1897 and 1898, and this cleaning was probably more thorough than in those two years even, inasmuch as it was done not only to accomplish a thorough cleaning, as ordinarily heretofore understood, but it was directed with intelligent purpose and design to destroy mosquitoes, and to prevent their incubation and propagation, it being now generally accepted that the mosquito, (especially *stegomyia fasciata*) is the chief and as some think, the only agent that introduces and transmits yellow fever, just as is the case with the anopheles and malarial fever.

The culex is a sportive songster, no harm in him, only he keeps you awake all night, and makes you cuss.

As to the aetiology, or origin or cause of yellow fever, according to authorities, it belongs to the order of zymotic diseases, that come of a ferment (resulting from outside causes, producing microscopic organisms), such as yellow fever, typhus and typhoid fever, scarlet fever, dyptheria, smallpox, syphilis, anthrax, bubonic plague, cholera—whether by outside agencies, indirectly, or by the direct contagion or infection matters little.

There is no doubt to my mind that if we will keep out filth, moisture and heat (these three) we will keep out the above mentioned low order of diseases. It takes the above three agencies, continued for sufficient length of time, to accomplish the consummation. No two of these agencies can do it. We can control the first two of the three above agencies; we cannot control the third. The first two we can control by cleanliness of person and premises, and by sewerage and drainage. Heat being from above is beyond our control.

And, further, as to yellow fever, if we will keep out filth, moisture, and heat, we will keep out mosquitoes, and if we keep out mosquitoes we will keep out yellow fever, and vice versa; and, as a converse, if we keep out yellow fever we will keep out mosquitoes, for the conditions of their existence are mutual and coöperative.

Of course, yellow fever can exist without these three concomitants, but to do so it cannot be indigenous or self-generative, but it must be imported, and thereby imparted, and this latter is the usual and almost universal way by which yellow fever establishes itself in any community so far north of the equator as is Charleston; and, having thus established itself, its residence and propagation, or extinction in such communities will depend upon the sanitary or non-sanitary conditions it there finds.

These seem to be propositions coming of experience, and well laid down, and consequently tenable and durable.

It therefore follows that to keep out yellow fever, and other kindred low orders of disease, we have two recourses, one is to keep ourselves clean, and to keep the city clean; and the other is to prevent the importation of disease by strict quarantine regulations and enforcement against any infected ports or cities or section of the country.

And that should be done at *any cost, no cost, however great can be comparable with the cost that will result* to the city directly and indirectly, by allowing the introduction into the city of the above mentioned diseases, whether from within, by slovenness of person and premises, and bad drainage, and bad sewerage and bad food and water; or from without by loose quarantine enforcements.

Prof. Paul M. Rea, of the College of Charleston, in his bulletin of October, 1905, boldly asserts that if mosquitoes could be exterminated malaria and yellow fever would vanish from the face of the earth, and so say Doctors Reed and Carroll of the New Orleans Yellow Fever Commission, and Dr. White of the Marine Hospital Service. This is corroborated by all recognized authorities.

And in thus banishing malaria and yellow fever you will banish all other low order of diseases, such as typhus, and typhoid and scarlet fever, dyptheria, etc., for such diseases cannot maintain or exist except under unsanitary conditions.

This being the fact established by the observation and experience of the most heedful and learned scientists the world over, it follows that no money or labor should be spared to keep the city clean. To keep the city clean should be above all other considerations in the minds of the honorable councillors and our duly elected counsellors and guardians, for thereby they will assure to their fellow citizens the three greatest of temporal blessings "peace, plenty and prosperity."

To do this the work should begin right now, in January and not wait until July, August and September, when the stegomyia and anopheles and culex and the other four hundred varieties of mosquitoes known to entymologists get the under-grip on you.

Patrick Henry said: "In time of peace prepare for war."

Men, money and measures should not be stinted.

To keep the city in health is worth millions upon billions of dollars to her citizens, even could such a consummation be estimated in money value only.

Ben Franklin says, "Experience is a dear school, but fools will learn in no other."

INSANE PEOPLE:

The Department has had imposed upon it thirteen crazy people during the last six or eight months. Some of these cases proved mild and temporary, and resolved themselves, and were returned to their homes—while others were persistent and violent cases, and had to be sent to the Asylum at Columbia. Meanwhile they were lodged at the jail or the police station until transfer papers could be gotten from Columbia, the temporary hospital at the Thomson Auditorium not being in case to receive such patients.

The insane ward at the old City Hospital, being of wood, was set fire to by one of its inmates about three or four years ago, and two or three of the patients were burnt up, and the balance of them were singed to death. About a year later a brick fire-proof insane ward was built by the city; but, not long after this, the new Roper Hospital was substituted for the old hospital, and in the demolition of buildings that ensued the insane ward was stuffed and jammed with old building materials, and through some such management there was no place left or provision made for insane people. And this has been a big bother to our department ever since your present Health Officer has been in office, and I do not know that we are yet relieved of this dilemma, although I suppose that we will be when the contemplated transfer of the hospital service of the city from the old service to the new Roper Hospital service is finally accomplished.

QUARANTINE VS. YELLOW FEVER.

There was inaugurated by the Board of Health, the Mayor and City Council assisting, a most strict system of quarantine by land and by sea.

This was kept up for nearly four months, from July 15 to November 1. Four policemen and four citizens were appointed to stand at the gates of the city, at the Seven Mile Junction, day and night, and to demand of each and every person proposing to come into the city by rail or otherwise, that an official certificate of health be produced, showing where they came from, and their state of health, etc.

The same system was put in practice as to vessels coming into this port, especially from the South; and, when parties could not produce a clean bill of health, they were turned back. The land system was enforced by the Chief of Police, Major Boyle, who made daily reports to the Health Officer, and also to the Chairman of the Board of Health, Dr. T. Grange Simons.

The system by sea was enforced under Mr. Hall T. McGee, Chairman of the Quarantine Committee, by the Quarantine Officers of the Port, Dr. Robert Lebby, aided by his Assistant, Dr. Tupper, and reports made to the Health Officer.

By the combined and harmonious efforts of this aggregation of the quarantine forces by land and by sea, and by the intelligent and arduous efforts of the Sanitary Inspectors of the city, under the control of the Health Officer, the result was that that scourge, the yellow fever, was kept out of the city. And too much merit and credit cannot be given to all the persons and officers engaged in this work.

When parties proposing to enter the city by sea could not give a satisfactory account of themselves, they were not allowed to land, but were required to remain aboard the vessel on which they came; or, else, if suspected of having yellow fever or any infectious disease, they were sent to the Lazaretto on James Island. We had one such suspect on our hands, which proved to be malarial fever. Those coming by land, without official certificates, were turned back, or else put in camp (car) of detention at the Seven Mile Junction, and kept there under guard for five days—a large number, probably 100, were thus disposed of.

The same rigid system was enforced as to freight coming into the city from any infected or suspected city or section of country; and unless such cars had a placard nailed on them conspicuously, certifying officially, by the Marine Hospital Service, that they had been thoroughly fumigated before their freight or contents had been put into them, such cars were not allowed to enter the city, but were turned back, or else fumigated, or detained at the Seven Mile Junction for five days. We had cases of two such cars from New Orleans loaded with rice.

FORT JOHNSON.

The quarantine station and Lazaretto at Fort Johnson, on James Island, in the harbor, are managed by Dr. Robert Lebby, assisted by Dr. Tupper, with Mr. R. B. Fulcher, captain of the launch "Hattie", and two colored laborers to man the boat used by the doctors for boarding all vessels entering the harbor, to demand of them a certificate as to where from, character of the cargo, state of health, etc.

There is no better quarantine station, as to location, equipment, management, etc., in the whole country than is ours. It is up to the best systems of the day in every particular.

The whole plant is under the control of a Subcommittee of the Board of Health, consisting of Mr. Hall T. McGee, Chairman, and Messrs. W. P. Carrington, G. M. Pollitzer and Drs. C. W. Kollock and F. L. Frost.

Our citizens need not be afraid of the introduction into this city by sea or by land, from within or from without, of yellow fever or of any other infectious, contagious or pestilential disease, so long as the present Board of Health and its subordinate officers are kept in office by the City Council, and sufficient means are afforded to accomplish the end.

GARBAGE.

The garbage of the city is removed by the city itself, and is therefore presumably done more effectively than if let out to contract. During 1904-1905 it was removed from over the larger part of the city three times a week, except that during the months of July, August, September, October, 1905, the garbage was removed four times a week, under requirements of the Board of Health, as an extra precaution against the apprehended invasion of yellow fever. In my judgment it would be well to remove the garbage daily, as was done prior to 1904, certainly during the six summer months; say from May to October inclusive, especially so considering the comparatively large proportion of negro population living in many sections of the city, huddled together in lanes, rows and lots, as many as 100 to 200 in each such place, often in unfit and dilapidated structures, untenable except by negroes of the poorest and lowest classes, and in most such cases the land is low, impracticable of being drained, and consequently subject to overflow by rains, resulting in filthy cess-pools, breeding mosquitoes, misery and death. Such sections of the city should surely be visited by the garbage cart daily.

The health and salubrity of the city are of the first and utmost importance. All other considerations, be they of economy or what not, sink into insignificance—with a healthy city known and reputed as such, we will grow and prosper; with the contrary, there will be the contrary.

•SMALLPOX AND THE PEST HOUSE.

There have been thirty-three cases of smallpox showing themselves in this city within the year 1905. They were all brought here by land or by sea, by rail from the surrounding country, or by boat from the neighboring islands, and dumped upon us, *nolens volens*. And being here, we had nothing to do but to take care of them, and to remove them as quickly as possible to the pest house, where they could be best treated, and do no harm to others.

They were all negroes, except three white men and one white girl, coming two from Florence and one from the navy yard, and one in the city or the intermediate country between the city and Florence, by the N. E. R. R.

The railroads are not wholly to blame, for with all these diseases coming of a specific blood poison, they are difficult of a diagnosis in the early stages, and the symptoms do not plainly declare themselves until there is an obvious pronouncement; and then it is too late for any prophylactic or corrective measures, and the subject has to be taken hold of and put out of the way of doing harm to us; and thus a stranger and an alien will become a focus of infection and a burden to the city. This should not be, but I do not see how it is to be prevented wholly, only in a measure, surrounded as we are by negroes around and about, anywhere and everywhere, and usually in a dreadful state of filth and destitution.

Most of these thirty-three cases have been of mild type, and yielded to treatment after ten to fifteen days. Others again have been malignant and confluent, and consequently stubborn of treatment; one, indeed, went so far as to die, a negro man, about forty years old; but, poor fellow, he was not to blame, nor were we, as he was dumped off on the roadside just by us, and had quickly to be removed to the pest house. I determined that that negro should not die, at least not on our hands, and I told Mr. Nipson and Chloe, the nurse, so; but he did die, early one Sunday morning, about 2 o'clock, although we did all that we could for him; he came to us practically dead. His name was George Washington. All the others got well and were discharged, washed and disinfected with formaldehyde,

and with clean clothes on, they went on their way grateful and rejoicing that they were well, and that there was such a place as the pest house. All the above cases were treated by myself, with the valuable assistance of Health Detective Nipson, and of Mr. A. Waring Mitchell, in the absence of Mr. Nipson.

The pest house is admirably located, on a promontory, jutting out into an expanse of salt water on the Cooper river, practically remote from the city, although only about four miles distant. There are two houses, with ample accommodations for the two sexes and the two colors, and it is liberally provided for by the city, and it is worth many times over to the city than what it costs to maintain it. It is in fact, a *sine qua non*, as is also the quarantine station at Fort Johnson.

VACCINATION.

There should be instituted by the city authorities a rigid system of vaccination within our bounds yearly, or at least every second year, as was done some years ago.

Smallpox is walking and stalking and ranging around all over this country, in the up and middle country, as well as in the low country. We may not be able to keep it out wholly by vaccination, but we can keep it out to a great degree, and when it does manifest itself thus by invasion, it cannot spread itself in our midst; or, if so, in a mild form.

Compulsory vaccination was legalized by an Act of the Legislature in January, 1905, and in 1898 it was put in practice under advice and supervision of the late Dr. Horlbeck, and the good results are notable to this day in preventing the introduction and spread of smallpox, as also in greatly modifying the virility of such cases as may occur. The enforcement of such compulsory vaccination must be practiced with some common sense, and with some respect for the sensibilities and temperaments of the subjects; but the physician must not be finally deterred from his purpose.

Dr. Schamberg, of the highest authority in infectious diseases, says; "If a person persists in not being vaccinated, he multiplies his chances of having smallpox. There is no excuse at the present day for any one to perish of smallpox.

"The man who refuses to have his children vaccinated is guilty of criminal negligence; more so than he who stores in his house dangerous explosives".

BATHS.

It does seem strange that in a city like this, with about six to eight miles of ocean salt water frontage, there should be no resorts for public bathing; on the contrary, if any one attempts a bath, or a lot of boys, especially, should sneak into an open abandoned dock they are confronted and pursued by a policeman (under the ordinances), and if the policeman should fail to catch them, he carries off their clothes and leaves the boys in a nude dilemma. This should not be, for to be clean without tends to make a man clean within, and thus to make him honest and sober and industrious and self-respecting, for it is said that "cleanliness is next to godliness."

I cannot see that the city can have any excuse for not affording ample facilities for free bathing for all classes of our community, big and little, white and black, male and female.

The city lost a splendid opportunity for getting at least one good bath house in the failure to purchase the establishment lately at the foot of Tradd street, a pay place, say; all other such places could be out in the open, with only a Board fence to shield from the public gaze.

And, besides, swimming is a splendid exercise, and must the boy learn to swim on dry land, like the venturesome maiden, who, upon asking permission of her mother, got answer:

"Mother, dear, can I go in to swim"?

"Yes, my darling daughter,

Hang your clothes on a hickory limb,

But don't go near the water".

Swimming is a noble art, life-preserving, and often life-saving, as to yourself and others, and yet there are hardly a hundred boys in the City of Charleston today but that would go to bottom like a rock if thrown overboard.

ROTTEN FOOD.

During the summer a carload of tainted hams was reported by Sanitary Inspector Courtenay, and a summary disposition was made of them by requiring that the meat be deported beyond harm's way.

Also a carload of rotten fish (mulletts) was reported by Health Detective Nipson, and they were dumped into the Cooper river, and floated away on the ebb tide out to sea.

THE WORK OF THE DEPARTMENT.

The work of the Department has gone on with regularity, notwithstanding that it was much greater than in ordinary years, owing to various circumstances, but especially to the yellow fever scare during the months of July, August, September and October.

The Health Detective and the Sanitary Inspectors were hard run in the field, and the Clerk, Mr. J. Faber Porcher, and the Health Officer were kept busy every day, and all day, morning, noon, afternoon and night, issuing health certificates to parties leaving the city and answering all sorts of calls, early and late, there being no respite at our homes, even.

We issued over 10,000 health certificates to parties leaving the city.

The health office has been open every day in the year, week days, Sundays, Christmas, New Year's, Fourth of July, Thanksgiving, and hot or cold, rain or shine—on week days from 9 to 4 o'clock, and on Sundays from 9:30 to 12:30 o'clock, and on call at all hours, day and night the year round.

If there be any soft snap about this Department, the employees and officers have not discovered or enjoyed it.

And the Board of Health has had its share of work and responsibility, and the special subcommittee appointed by the Board and the Mayor, a member *ex-officio* of this special Committee. They were on the alert, holding a great many meetings, as many as twenty-six meetings were held in the month of August alone, and a proportionate number during the months of July, September, October, when on November 1st the quarantine restrictions were removed, and not until then did we have any respite. I can tell you, Gentlemen of the Council, that if anybody takes this office of Health Officer as a cinch, he will find himself woefully fooled. The work of the office is not only great, but it is responsible work, and it never ceases.

FINIS.

And now, Mr. Mayor and Gentlemen of the Council, my good friends all, it being prescribed by the city ordinance "that annually on the 1st of January the Health Officer shall submit to the council such suggestions and recommendations as he may deem expedient and proper," I have outlaid the same as above presented.

An obligation imposed is presumptive of an obligation assumed by the party imposing it, and therefore, is always dual and reciprocal, and thus, my implication, imposes an equal obligation on both parties concerned.

It is puerile and futile for the Health Officer year after year to make suggestions and requirements, as he is commanded to do, if the governing body pays no heed to them, and may not even have taken the trouble to read them.

Now, if these annual reports are to be of any use, and not become farcical, and used merely as stuffing material to fill up the Mayor's year book, they must be at least entertained and considered by the council, and then, be the suggestions not feasible, or impracticable, or not desirable, why then commit them to the waste basket of the mind.

I have been a citizen of this town for a good while. I was in city council for going on six years; I have been Health Officer for going on one year. I have read heedfully the annual reports of my worthy predecessors for a good many years past, and the reports of other health Officers all over the country; and, with my varied professional and general experiences, I think that my observations and suggestions should carry some weight.

To summarize partially, I have advised that:

1. The city drains be flushed daily, by water from the Atlantic ocean, driven forcibly by steam power directly through the open drains.

2. That the present Goose Creek water supply, properly treated and filtered, be used for domestic purposes.

3. That the number of free water cocks and open troughs in the streets of the city be increased.

4. That low lots, public and private, be filled with clean earth brought in by the city.

5. That all butcher pens be run out of the city forthwith.

6. And all cow lots ditto.

7. That an abattoir be established clear outside of the city limits.

8. That an educated, competent Inspector of cattle, meats and milk be appointed.

9. That public baths be established along the water front.

10. That privy vaults be filled and obliterated as soon as practicable.

11. That garbage be removed daily, that is, six times a week; or at least so for the six summer months, May to October, and for the other six months, four times a week.

12. That yellow fever and all other fevers, and all contagious, infectious and pestilential diseases be kept out of this town, that to this end the town be kept clean; and, to the same end:

13. *That mosquitoes be fought the year round, day in and day out, until they be extinct, and kept extinct.*

14. That compulsory vaccination be put in force.

15. That suitable apparatus be afforded the city Bacteriologist for testing milk physically and chemically.

The above measures are all practicable, and in undertaking them you will have the satisfaction of knowing that you are working on right lines to a final and successful consummation.

You will say that to do all the work as above outlaid will cost time and money, but there is nothing worth doing that does not cost time and money, and that is what time and money are made for.

Much more could be written upon any and all of the above subjects, and more ably written, and upon many other matters pertinent to the health and well-being of the city, but I am afraid that you gentlemen are all worn out already—so I will reluctantly desist.

Respectfully,

F. L. FROST, M. D.,
Health Officer.

Charleston, S. C., January 1, 1906.

MORTUARY STATISTICS.

Report of the Number of Deaths in the City of Charleston for Each
Month for the Year 1905.

WHITES.

Cause of Death.	Months.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Abcess			1									1
Abcess, Lung												1
Anaemia, Pernicious										1		1
Aneurism Aorta									1			2
Angina Pectoris	2	4	3		1	1	3	3	1	1	4	3
Apoplexy	2	1				2						1
Appendicitis												1
Arterio Fibrosis	2		1	1	1				1			6
Arterio Schlerosis	2			1	1				1			6
Asthenia				4	1				1			3
Asthma, Bronchial	1	1							1			3
Atheroma, Arteries				1								1
Brain, Congestion of		1										1
Brain, Effusion on			1									3
Bright's Disease, Acute			3	6	1							1
Bright's Disease, Chronic	8	8		4	6	2	3	2	5	1	3	5
Bronchitis	1	2				1	1	1				5
Bronchitis, Tubercular					1							1
Cancer				1								1
Cancer, Gastric						1						1
Cancer, Intestines	1											1
Cancer, Liver				1								1
Cancer, Mesentery					1							1
Cancer, Pancreas									1			1
Cancer, Rectum						1						1
Cancer, Stomach						1		3				4
Cancer, Tongue											1	
Cancer, Uteri	1			1	3							5
Cholera Infantum				1		1	1					3
Cholera Morbus			1									1
Chorea					1		1					2
Cirrhosis, Kidney of											1	1
Convulsions			1		1							2
Convulsions, Puerperal				1			1					2
Cystitis				1	1							2
Dementia							1					1
Dentition										1	1	2
Diarrhoea	1		1									2
Diphtheria					1						1	2
Dysentery						1		1		1		3

Deaths in the City of Charleston.—Continued.

WHITES.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Eczema, Postulosum											1		1
Empyemia				1	1								2
Endocarditis			1			1		2		1		1	6
Endocarditis, Septic	1												1
Enteritis	1			1	3	1		1		1			8
Enterocolitis			1	3	4	4	5	1	2	2		1	23
Epilepsy	1			1	1								3
Epithelioma				1		1							2
Fever, Malarial							2	2	1	2			7
Fever, Puerperal									1	1			2
Fever, Scarlet							1				1		2
Fever, Typhoid		1			1	2	2		3	4	2	2	17
Gangrene					1				1				2
Gastritis		1		1			1	1			1		6
Gastro Enteritis				1	1	2	1						5
Goitre								1					1
Heart, Disease of		4	6	1	1	1	4	2	2	2	3	2	28
Heart, Malformation					1								1
Hemiplegia							1				1		2
Hemorrhage, Stomach											1		1
Hernia, Strangulated										1			1
Hydrocephalus											1		1
Hysteria					1								1
Ileo Colitis						1	1						2
Inanition	1												1
Influenza	1	3	3	1								1	9
Intestinal Obstruction		1											1
Intussusception				1									1
Laryngitis, Spasmodic									1				1
Liver, Cirrhosis				1					1	1			3
Lungs, Congestion								1					1
Lungs, Hyperaemia												1	1
Lungs, Oedema			1	1									2
Malnutrition							1					1	2
Marasmus			1		1						1		3
Measles									1				1
Meningitis		1	1										2
Meningitis, Cerebro-Spinal			1										1
Meningitis, Tubercular			1										1
Microcephalus					1								1

Deaths in the City of Charleston.—Continued.

WHITES.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Noma							1						1
Old Age	3	2	1			2		2	1	3	1		15
Parturition					1			1		1		1	4
Peritonitis					1							1	2
Periostitis												1	1
Perityphlitis										1			1
Pleurisy	1												1
Pneumonia		4	5	2		1	1		2	1	1	4	23
Pneumonia, Broncho					1	1	1					1	4
Poisoning, Morphine							1						1
Poisoning, Potomaine								1					1
Pyonephrosis			1										1
Rheumatism	1												1
Schlerosis Multiple												1	1
Septicaemia									1		1		2
Syphilis										1			1
Tetanus						1				1			2
Toxaemia												1	1
Toxaemia, Intestinal										1			1
Trismus Nascentium		1					1		2				4
Tuberculosis	2	8	3	4		1	4	4		4	1	4	35
Tuberculosis, Hip of							1						1
Tumor								1			1		2
Tumor, Breast of												1	1
Tumor, Intestinal												1	1
Tumor, Multiple								1					1
Ulcer, Stomach of	1												1
Ulcer, Tubercular					1								1
Uraemia							1					1	2
Whooping Cough				1			3	1		2	1		8
Total	33	43	43	38	38	36	42	31	31	37	27	41	440

Deaths in the City of Charleston.—Continued.

COLORED AND BLACK.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Abscess, Liver						1						1	2
Abscess, Pelvic		1			1								2
Albuminuria				1			1						2
Aneurism, Aorta of					1	1				1			3
Apoplexy	7	4	7	3	7	3	2	2	4	2	4	2	47
Appendicitis													2
Arterio, Sclerosis		3	1	1	1							1	7
Asthenia		1	1	1		1	2	1		1	2		10
Asthma, Bronchial			1										1
Atelectasis		1											1
Brain, Congestion of										1	1		2
Brain, Sclerosis				1									1
Bright's Disease, Acute			1	1	3			1				2	9
Bright's Disease, Chronic	3	8	7	10	14	5	7	7	5	7	9	10	102
Bronchitis	1		2	1			1				2	1	8
Bronchitis, Capulary						1							1
Cancer, Hepatic							1						1
Cancer, Rectum						1							2
Cancer, Stomach				1				1				1	3
Cancer, Uteri			1			1	2	1					5
Catarrh, Gastric				1									1
Catarrh, Intestinal					1								1
Cholera Infantum	1	1	1		6	3		1			1		14
Cholera Morbus					1		1				1		4
Convulsions	1			1	2		1	4	3	4	1		17
Convulsions, Puerperal	1	3	1			1			1				7
Cystitis					1								1
Debility										2	1		3
Dentition		1					1	1					5
Diarrhoea	1				2	2	5	3	3	1		1	18
Diphtheria											1		1
Diplegia						1					1		1
Dropsy		1							1			1	4
Dysentery				1		2	1						4
Endocarditis		2	3	3	1	1	2	1	2	2		2	19
Enteritis		2	4	2	5	12	12	15	7	14	6	3	86
Enteritis, Tubercular									2	1			3
Enterocolitis	1			2	3	1	9	5	6	3	1	2	33
Epilepsy	1									1			2
Epithelioma	1								1				1
Fever, Malarial					2	1	3	3	1	1	2	1	14

Deaths in the City of Charleston.—Continued.

COLORED AND BLACK.

Cause of Death.	Months.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Fever, Remittent	1	1	1	..	1	..	..	3
Fever, Thermic	2	1	1	1	3	1	1
Fever, Typhoid	1	..	1	..	..	..	..	..	..	..	..	12
Gangrene	1	..	..	..	..	1	..	..	..	2	..	3
Gangrene, Foot of	1	..	..	..	..	..	1
Gastritis	1	..	..	..	..	..	..	1	1	..	..	2
Gastro Enteritis	1	1	1	2	..	1	1	..	1	8
Heart, Disease of	3	1	3	5	4	3	4	4	5	10	5	7
Hemiplegia	1	54
Hemorrhage, Intestinal	1	1	..	..	1
Hemorrhage, Umbilical	1	..	..	1	..	1	1	..	1	5
Hernia, Strangulated	1	..	..	1
Hydrainion	1	..	..	..	..	..	..	..	1
Icterus	1	..	..	..	..	..	1
Ileo Colitis	2	1	..	3	3	3	..	9
Inanition	1	1	..	1	..	1	1	..	2	7
Influenza	6	3	..	..	..	..	1	1	..	..	9
Insolation	1	..	..	..	..	..	1
Intestinal Obstruction	1	..	..	1	..	1	..	..	..	..	..	3
Intussusception	1	..	..	..	..	..	..	1
Jaundice	1	..	..	1
Larynx, Oedemia of	1	..	..	..	..	1
Liver, Cirrhosis of	2	..	..	1	3
Liver, Congestion of	1	..	..	1	..	..	..	..	..	..	..	2
Lungs, Congestion of	1	..	..	1	..	2
Lungs, Oedema of	1	..	..	1	..	2
Lymphadenoma	1	..	..	..	..	..	..	..	1
Malnutrition	1	..	..	..	..	..	1	3	..	6
Marasmus	1	2	1	7	6	5	5	6	3	5	46
Measles	1	1	2	..	..	..	..	4
Meningitis	1	..	..	..	1	..	3
Meningitis, Cerebro	1	1
Meningitis, Cerebro-Spinal	1	..	..	..	..	1	1
Mitral Regurgitation	1	1
Myelitis	1	..	..	..	..	1
Myocarditis	1	..	..	..	1
Neurasthenia	1	1	..	..	..	..	..	..	2
Neuritis	1	..	..	..	..	1
Old Age	1	2	4	3	..	1	4	..	3	2	1	21

Deaths in the City of Charleston.—Continued.

COLORED AND BLACK.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Parturition			1										1
Peritonitis					1		1	1	1	1		1	6
Peritonitis, Tubercular													1
Pleurisy					1			1	1				3
Pleurisy, Tubercular													1
Pneumonia	9	9	5	4	1	1	1		3	1	3	6	43
Pneumonia, Broncho	5	13	1	1	2	6	1	7	1	1	1	1	32
Poisoning, Septic						1			1	1			3
Prostatitis		1											1
Pyæmia							1						1
Rachitis						1							1
Rheumatism						1							1
Sapremia										1			1
Scrofula					1				1				2
Septicæmia						1	2		1			1	5
Septicæmia, Puerperal				1		1		1			1		4
Septic Absorption										1			1
Stomatitis											1		1
Stricture	1		1										2
Syphilis	1		1						2				4
Tabes, Mesenterica								1	1				2
Tetanus	1				1	1	1			1			6
Toxæmia					1								1
Trismus, Nascentium	4	4	4	6	4	2	3	3	4	3	7	3	47
Tuberculosis	12	14	8	10	14	19	12	15	14	12	14		163
Tuberculosis, Intestinal	1	1				1			1				4
Tumor, Abdominal	1			1						1	1		3
Tumor, Brain on								1					1
Tumor, Gastric	1												1
Tumor, Liver on								1					1
Tumor, Neck on					1	1							2
Ulcers					1		1						2
Ulcer, Gastric				1									1
Ulcer, Leg of			1										1
Ulcer, Rectum of			1										1
Ulcer, Throat of			1										1
Uræmia							2	1	1	2	1	1	8
Urethra, Rupture of						1							1
Variola			1										1
Whooping Cough					2	5	12	1	3		1		24
Total	73	73	70	73	107	106	120	88	103	86	73	84	1057

Accidents, Premature Births and Interments Within the City Limits.

WHITES.

	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Premature Births	2	1	1	1		2			2	1			10
Accidents	1	3	1		1			3		1			10
Drowned		2									1		3
Homicide											1		1
Suicide	1									1			2
Undeveloped	1	1	1			1				1			4
Cyanosis											1		2
Asphixia						1	1				1		3
Totals	5	7	3	1	1	3	1	3	2	4		4	34

COLORED AND BLACK.

Premature Birth	1	4	1	..	6	4	2	..	1	2	2	1	24
Murder . . . . .	..	..	..	..	1	1	1	..	..	..	..	..	2
Accident	1	..	..	4	3	..	2	..	..	..	2	..	12
Drowned . . . . .	..	..	..	1	1	..	1	..	..	..	..	..	2
Burned . . . . .	..	..	3	1	..	..	..	..	..	..	1	..	4
Homicide . . . . .	..	2	1	..	1	..	4	1	1	2	1	2	15
Undeveloped	5	8	3	4	1	..	4	2	6	..	2	8	43
Totals	7	14	7	9	13	4	14	3	8	4	6	13	102

WHITES.

Interments Within the City Limits.													
St. Peter's Churchyard . . . . .	..	..	..	..	..	1	..	..	..	..	..	..	1
First Baptist . . . . .	..	..	1	..	..	..	..	1	..	..	..	..	2
First Presbyterians . . . . .	..	..	..	1	..	..	1	..	..	..	..	..	2
Second Presbyterians	1	..	..	..	..	..	..	1	..	..	1	..	3
St. John's Chapel	1	3	3	3	3	4	3	1	4	3	..	1	29
St. John's Lutheran . . . . .	..	..	1	..	..	..	..	..	..	..	..	..	1
St. Michael's . . . . .	..	..	..	..	..	..	..	..	1	..	1	..	2
St. Philip's . . . . .	..	1	1	1	..	..	..	..	1	..	..	..	4
St. Paul's . . . . .	..	2	..	..	..	..	..	..	..	..	1	..	3
Bethel . . . . .	..	1	..	..	..	..	..	..	..	..	..	..	1
Trinity . . . . .	..	..	..	1	..	..	..	..	..	..	..	..	1
K. K. B. E., Coming St.	1	..	..	..	..	..	..	..	..	..	..	..	1
Seaman's Ground	1	1	..	..	..	1	..	2	..	..	..	..	5
Totals	4	8	6	6	3	6	4	5	4	5	1	3	55

Accidents, Premature Births and Interments Within the City Limits.—Continued.

COLORED AND BLACK.

	Months.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Interments Within the City Limits.												
Beersheba	3	2	..	1	3	6	6	3	1	2	2	5
Calvary Episcopal	1	..	1	2	2	1	1	..	..	..	..	..
Colored Catholic . . . . .	..	1	3	5	7	1	..	..	..	..	..	..
Colored Lutheran	2	7	3	12	12	14	6	10	5	10	5	8
Colored Scotch	4	4	2	12	5	5	9	6	5	13	8	6
Ephrat	10	13	11	11	1	..	1	..	..	..	..	..
Field of Rest	10	13	11	3	12	10	14	9	11	6	12	15
McPhelia . . . . .	..	..	..	..	..	..	2	..	..	..	..	..
Brandts or Wysingers Farm	1	4	2	4	3	1	6	2	9	2	5	6
Brown Fellowship . . . . .	..	..	..	..	..	1	..	1	..	..	..	..
Totals	21	31	21	27	42	39	45	30	32	37	32	41
												398

PUBLIC.

White	2	..	..	..	..	..	1	..	..	1	2	..
Colored and Black	34	29	20	23	44	28	32	30	34	26	29	22
Totals	36	29	20	23	44	28	33	30	34	27	31	22
												357

Number of Deaths with Ages for Each Month for the Year 1905. Births, Twins and Sex in Each Month.

WHITES.

AGES.													
Under 1 Year	1	1	3	9	1	6	11	3	5	2	3	5	62
From 1 to 5 Years	1	1	6	1	5	3	6	3	4	4	3	2	39
From 5 to 10 Years . . . . .	..	..	..	..	..	2	1	1	1	1	..	..	7
From 10 to 20 Years	1	2	..	3	2	1	3	1	1	1	3	3	21
From 20 to 30 Years	5	2	3	3	5	1	2	4	1	7	4	4	41
From 30 to 40 Years	6	7	4	3	2	4	4	4	..	1	1	1	39
From 40 to 50 Years	2	2	6	2	..	7	4	2	3	8	..	2	38
From 50 to 60 Years	3	10	4	2	6	1	4	4	8	2	4	6	54
From 60 to 70 Years	4	8	3	6	4	7	2	3	1	2	3	5	48
From 70 to 80 Years	6	3	10	8	2	1	5	5	3	5	3	8	59
From 80 to 90 Years	4	6	4	1	1	3	..	2	4	3	1	1	30
From 90 to 100 years . . . . .	..	1	..	..	..	..	..	..	..	..	..	..	2
Over 100 Years . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	33	43	43	38	38	36	42	31	31	37	27	41	440

Accidents, Premature Births and Interments Within the City Limits.—Continued.

WHITES.

	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Under 1 Year	13	12	14	17	32	27	28	18	24	16	15	17	233
From 1 to 5 Years	6	4	4	6	18	25	32	27	25	14	8	9	178
From 5 to 10 Years	1	1	2	2	2	4	2	2	1	3	1	4	23
From 10 to 20 Years	5	2	2	5	2	9	6	3	8	5	6	3	56
From 20 to 30 Years	6	10	14	11	11	11	17	12	13	8	11	15	139
From 30 to 40 Years	15	14	8	9	12	11	7	9	11	8	3	8	115
From 40 to 50 Years	10	11	8	7	12	7	8	7	10	12	5	17	114
From 50 to 60 Years	8	10	5	7	11	5	8	2	8	6	13	5	94
From 60 to 70 Years	7	4	7	6	5	3	7	1	1	6	6	6	59
From 70 to 80 Years	1	4	4	3	..	2	4	1	..	7	4	1	31
From 80 to 90 Years . . . . .	..	..	2	2	2	2	1	..	1	1	1	..	12
From 90 to 100 Years	1	1	..	..	..	..	..	..	1	..	..	..	3
Over 100 Years . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	73	73	70	73	107	106	120	88	103	86	73	85	1057
Grand Totals	106	116	113	111	145	142	162	119	134	123	100	126	1497

BIRTHS.													
White	32	30	29	31	32	16	22	36	29	27	25	32	341
Colored and Black	64	58	59	60	50	47	63	62	67	59	55	71	715
Totals	96	88	88	91	82	63	85	98	96	86	80	103	1056

TWINS.													
White . . . . .	..	2	..	..	..	1	..	1	..	..	..	..	4
Colored and Black	2	2	2	2	2	1	1	2	..	1	..	1	16
Totals	2	4	2	2	2	2	1	3	..	1	..	1	20

Total Mortality.

White Male	15	16	23	20	18	18	22	20	15	19	10	21	217
White Female	18	27	20	18	20	18	20	11	16	18	17	20	223
Totals	33	43	43	38	38	36	42	32	31	37	27	41	440
Colored Male	41	34	35	31	50	47	49	50	38	31	42	42	498
Colored Female	32	39	35	42	57	56	73	39	53	48	42	43	559
Totals	73	73	70	73	107	106	120	88	103	86	73	85	1057
Grand Totals	106	116	113	111	145	142	162	119	134	123	100	126	1497

Number of Deaths in Each Month, with Place of Nativity, Still Born and Marriages for the Year 1905.

WHITES.

	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
City of Charleston	16	17	21	19	24	17	26	14	15	12	18	23	222
South Carolina	8	11	7	6	9	6	5	7	7	11	3	4	84
Tennessee	1	1	1	1	1	1	1	1	1	1	1	1	12
Italy	3	4	3	4	1	1	3	4	2	2	1	4	31
Germany	1	1	1	1	1	1	1	1	1	1	1	1	12
Poland	1	1	1	1	1	1	1	1	1	1	1	1	12
Georgia	1	1	1	1	1	1	1	1	1	1	1	1	12
Ireland	1	1	4	3	1	3	1	2	3	3	1	3	24
Pennsylvania	1	1	1	1	1	1	1	1	1	1	1	1	12
New York	1	2	1	1	1	2	1	1	1	4	1	2	14
Spain	1	1	1	1	1	1	1	1	1	1	1	1	12
Sweden	1	1	1	1	1	1	1	1	1	1	1	1	12
Scotland	1	1	1	1	1	1	1	1	1	1	1	1	12
England	1	1	1	1	1	1	1	1	1	1	1	1	12
Virginia	1	1	1	1	1	1	1	1	1	1	1	1	12
Maryland	1	1	1	1	1	1	1	1	1	1	1	1	12
Massachusetts	1	1	1	1	1	1	1	1	1	1	1	1	12
France	1	1	1	1	1	1	1	1	1	1	1	1	12
New Jersey	1	1	1	1	1	1	1	1	1	1	1	1	12
Austria	1	1	1	1	1	1	1	1	1	1	1	1	12
Kentucky	1	1	1	1	1	1	1	1	1	1	1	1	12
Russia	1	1	1	1	1	1	1	1	1	1	1	1	12
Canada	1	1	1	1	1	1	1	1	1	1	1	1	12
Mississippi	1	1	1	1	1	1	1	1	1	1	1	1	12
North Carolina	1	1	1	1	1	1	1	1	1	1	1	1	12
Illinois	1	1	1	1	1	1	1	1	1	1	1	1	12
Norway	1	1	1	1	1	1	1	1	1	1	1	1	12
Wales	1	1	1	1	1	1	1	1	1	1	1	1	12
Bohemia	1	1	1	1	1	1	1	1	1	1	1	1	12
East India	1	1	1	1	1	1	1	1	1	1	1	1	12
Unknown	2	2	4	1	2	1	2	1	2	1	2	1	18
Totals	33	43	43	38	38	36	42	31	31	37	27	41	440

Number of Deaths in Each Month, with Place of Nativity, Still
Born and Marriages for the Year 1905.

COLORED AND BLACK.

NATIVES OF	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
City of Charleston	39	38	35	33	51	62	72	35	43	36	38	43	526
South Carolina	31	31	29	33	48	35	34	44	55	40	31	34	445
North Carolina		1		2								1	4
Georgia			1		1		1			1		1	5
West Indies		1						1					2
Virginia				1	1		1	1	1		1		6
Washington, D. C.											1		1
Ohio												1	1
Alabama												1	1
Unknown	3	2	5	4	6	9	12	7	4	8	2	4	66
Totals	73	73	70	73	107	106	120	88	103	86	73	85	1057

Still Borns.

	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
White Male	1	1	2	1	2	1	4	1	1	2	2	1	18
White Female	1	1	1	1	1	2			1		2		10
Totals	2	1	3	2	3	3	4	1	2	2	4	1	28
Colored Male	12	6	7	8	14	7	1	6	5	10	9	9	94
Colored Female	6	10	5	6	6	9	10	5	6	7	10	4	84
Totals	18	16	12	14	20	16	11	11	11	17	19	13	178
Grand Totals	20	17	15	16	23	19	15	12	13	19	23	14	206
MARRIAGES.													
White	23	16	11	23	9	4	4	7	20	20	20	29	216
Colored and Black	22	17	19	29	15	27	14	17	20	32	27	21	260
Totals	45	33	30	52	24	31	18	24	40	52	47	50	476

Comparative Mortality.

YEARS.	Whites.			Blacks and Colored.		
	Population.	Number of Deaths.	Proportion of Deaths.	Population.	Number of Deaths.	Proportion of Deaths.
1905	24,238	440	1 in 55	31,569	1,057	1 in 30
1904	24,238	455	1 in 53	31,569	1,089	1 in 28
1903	24,283	426	1 in 57	31,522	1,041	1 in 32
1902	24,285	461	1 in 52	31,522	1,153	1 in 27
1901	24,585	477	1 in 51	31,522	1,149	1 in 27
1900	24,285	484	1 in 54	31,522	1,242	1 in 28
1899	28,870	526	1 in 54	36,265	1,277	1 in 39
1898	28,870	491	1 in 58	36,295	1,258	1 in 28
1897	28,870	447	1 in 64	36,295	1,143	1 in 31
1896	28,870	521	1 in 55	36,295	1,348	1 in 26
1895	28,870	540	1 in 53	36,295	1,297	1 in 28
1894	28,870	479	1 in 60	36,295	1,300	1 in 27
1893	28,870	535	1 in 52	36,295	1,284	1 in 28
1892	28,870	586	1 in 49	36,295	1,317	1 in 27
1891	28,870	553	1 in 52	36,295	1,371	1 in 28
1890	28,870	511	1 in 56	36,295	1,310	1 in 26
1889	27,605	516	1 in 52	32,540	1,431	1 in 23
1888	27,605	419	1 in 56	32,540	1,375	1 in 23
1887	27,605	549	1 in 50	32,540	1,316	1 in 24
1886	27,605	571	1 in 48	32,540	1,596	1 in 20
1885	27,605	487	1 in 56	32,540	1,250	1 in 26
1884	27,605	592	1 in 42	32,540	1,215	1 in 22
1883	27,605	540	1 in 46	32,540	1,286	1 in 28
1882	25,000	584	1 in 45	27,286	1,172	1 in 23
1881	22,713	651	1 in 34	27,286	1,292	1 in 21
1880	22,713	500	1 in 45	27,286	1,121	1 in 24
1879	22,713	517	1 in 43	27,286	1,075	1 in 25
1878	22,713	514	1 in 43	27,286	1,125	1 in 24
1877	24,528	555	1 in 44	32,012	1,258	1 in 22
1876	24,528	668	1 in 36	32,012	1,343	1 in 23
1875	24,528	624	1 in 39	32,012	1,240	1 in 25
1874	24,000	718	1 in 33	26,000	1,230	1 in 21
1873	22,145	507	1 in 43	26,811	1,009	1 in 26
1872	22,145	521	1 in 40	26,811	1,036	1 in 25
1871	22,145	714	1 in 81	26,811	956	1 in 28
1870	22,145	539	1 in 41	26,811	1,075	1 in 24
1869	20,353	453	1 in 44	24,570	819	1 in 26

Comparative Mortality.

DEATH RATE PER THOUSAND IN THE YEAR.

YEARS.	White.	Black and Colored.	Total.
1905	18.15	33.47	26.82
1904	18.77	34.40	27.60
1903	17.50	32.99	26.28
1902	18.98	36.49	28.88
1901	19.10	36.45	29.09
1900	18.21	35.10	30.90
1899	18.21	35.19	27.66
1898	16.97	34.13	26.82
1897	15.52	31.49	24.39
1896	18.04	37.14	28.68
1895	18.70	35.45	28.18
1894	18.68	35.81	27.29
1893	18.53	35.37	27.91
1892	20.29	36.28	29.20
1891	19.15	37.77	29.06
1890	17.70	36.93	27.94
1889	19.05	43.66	30.79
1888	18.78	42.25	30.87
1887	19.52	40.40	31.00
1886	20.65	49.01	36.02
1885	17.64	38.49	28.88
1884	23.68	44.63	34.55
1883	21.60	47.13	34.92
1882	22.32	42.91	33.11
1881	28.66	47.13	38.08
1880	22.01	40.43	32.44
1879	20.68	43.59	27.92
1878	20.95	36.14	28.95
1877	22.66	30.29	32.05

Current Expenses for 1905.

Appropriation	\$19,000 00	
Extra Appropriation	2,800 00	
		\$21,800 00
Health Officer	1,800 00	
Bacteriologist	1,308 04	
Clerk to Health Officer	1,200 00	
Health Detective	960 00	
Four Sanitary Inspectors	2,442 54	
Disinfection	1,345 67	
Quarantine Station Repairs	500 00	
Yellow Fever Quarantine	2,491 55	
Dispensary Physicians	5,100 00	
Dispensary Druggist	2,864 37	
Pest House	1,164 34	
Printing and Stationery	374 20	
Petty Cash	60 50	
Repairs to Drinking Fountains	100 30	
Miscellaneous	72 00	21,783 51
Balance to Income Account		\$16 49

F. L. FROST,
Health Officer.

January 1, 1906.

REPORT OF BACTERIOLOGIST.

Charleston, S. C., January 1, 1906.

Dr. F. L. Frost, Health Officer:

Dear Sir: I have the honor to submit my annual report from the Bacteriological Laboratory of the Board of Health. The amount of work that has been done, and its scope, are shown in the appended tables. An increase in the number of positive typhoid reports over those of last year will be noticed. This prevalence of typhoid fever will be likely to continue until the removal of our unsanitary surface privies, and the discontinuance of the use of underground cisterns and well water. The Goose Creek water, in its present improved physical and chemical condition, is much to be preferred upon sanitary grounds and should be recommended. It will be well to repeat here what was said in the report of 1904 concerning the insufficiency of a bacteriological examination to determine the quality of milk and its fitness for use. For this purpose it will be necessary to make provision for testing milk physically and chemically.

During the past year Dr. G. McF. Mood has been assistant in the Bacteriological Laboratory, and his valuable services have added considerably to the efficiency of the department.

TABLE I.

SPECIMENS.	Number Examined.	Positive Results.	Second Examinations in Positive Cases.	Positive Cases.
Blood, Malaria	13	1		1
Blood, Typhoid Fever	597	224	3	221
Feces	2			
Sputum, Pneumonia	21			
Sputum, Tuberculosis	227	60		60
Swabs, Diphtheria	26	9		
Tumors	1			
Urine	1			

TABLE II.
CISTERNS AND WELL WATER.

SAMPLES.	No. of Bacteria Per C. C.	
	Number Examined.	Condemned.
Cistern Water	311	78
Well Water	35	16

TABLE II.
GOOSE CREEK WATER.

DATE—1905.	Source of Sample.	No. of Bacteria Per C. C.	
		Rain Water.	Filtered Water.
January 1	Laboratory Faucet	325	175
January 17	Laboratory Faucet		143
January 31	Laboratory Faucet		110
February 14	Laboratory Faucet		364
February 22	Laboratory Faucet		35
March 3	Laboratory Faucet		125
March 16	Laboratory Faucet		470
March 20	Laboratory Faucet		300
March 27	Laboratory Faucet		165
April 1	Laboratory Faucet		60
April 17	Laboratory Faucet		288
April 21	Laboratory Faucet		85
May 10	Laboratory Faucet		264
May 13	Laboratory Faucet		580
May 29	Laboratory Faucet		500
June 1	Laboratory Faucet		425
June 8	Filter Plant		110
June 24	Laboratory Faucet		135
June 30	Laboratory Faucet		380
July 9	Laboratory Faucet		120
July 16	Laboratory Faucet		245
July 24	Laboratory Faucet		75
August 5	Laboratory Faucet		1,400

Respectfully submitted,
ROBERT WILSON, JR., M. D.,
Bacteriologist.

REPORT OF C. ADAMS, KEEPER DISINFECTANT STATION FOR 1905.

Charleston, S. C., Dec. 30, 1905.

F. L. Frost, M. D., Health Officer City of Charleston, S. C.

Dear Sir: Having submitted for your official information monthly reports from May to November, the volume of work performed at the Disinfecting Station, when the carts were in service, showing the number of private premises and street drains served with disinfectants, as well as the number of persons served on order, or by personal application at this station, I now respectfully ask to submit the total figures of the work performed for each calendar month of the year 1905:

DISINFECTING DEPARTMENT OF THE BOARD OF HEALTH, 1905.		Disinfectants delivered to Private Premises, Street Drains, etc.	Number of Gallons of Copperas Solution Sup- plied to Private Premises, Street Drains, etc.	Number of Persons Served with Disinfectants on Personal Application and on order from the Station.
January.....	.....	.....	.....	47
February.....	.....	.....	.....	32
March.....	.....	.....	.....	83
April.....	.....	.....	.....	105
May.....	One Disinfecting Cart in Service..	364	6,110	189
June.....	One Disinfecting Cart in Service..	583	5,384	170
July.....	One Disinfecting Cart in Service..	623	5,764	221
August.....	Two Disinfecting Carts in Service..	1,478	11,268	361
September.....	Two Disinfecting Carts in Service..	1,502	10,502	203
October.....	Two Disinfecting Carts in Service..	1,214	9,796	133
November.....	One Disinfecting Cart in Service..	619	4,904	110
December.....	.....	.....	.....	52
Totals ..		8,044	53,728	1,706

I most respectfully beg to call your attention to the dilapidated condition of the building at the Station, the shed, flooring and sides all being in bad order. The water pipes also need repair.

I also report disinfecting material on hand as follows:

Dry Copperas 2 bbls.—800 lbs.
Phinotas Liquid. 15 gallons.
Chloride Lime. 50 lbs.
Lime 1 ton or so.

Respectfully submitted,

C. ADAMS,
Keeper Disinfecting Station.

REPORT OF HEALTH DETECTIVE.

Charleston, S. C., Dec. 31, 1905.

To Dr. F. L. Frost, Health Officer.

Dear Sir: To December 31, 1905, attended at Pest House with smallpox, 33 cases; burned bedding, 5 pieces; steamed at hospital, 3 pieces; fumigated, whites, 265; colored, 6; burned bedding and clothes, 4. Among the smallpox were three white males and one white female. Had but one death from smallpox (colored) in the year 1905.

A short time after the Pest House was closed there was one smallpox case on Washington street, which was secluded, attended and patient recovered.

Yours respectfully,

F. NIPSON,
Health Detective.

REPORT OF HEALTH OFFICER F. L. FROST.

Number of cows in the city by recent canvas of the Sanitary Inspectors:

	Cows.
District No. 1	51
District No. 2	173
District No. 3	109
District No. 4	101
Total cows in city	434

DISPENSARY PHYSICIANS.

Dr. S. J. Taylor.
Dr. T. W. Reynolds.
Dr. G. Fraser Wilson.
Dr. T. B. Johnson.
Dr. J. Austin Ball.
Dr. Wm. Mazyck.

DISPENSARY DRUGGISTS.

The following were the Druggists appointed by the Board of Health for 1905:

Health District No. 1—A. O. Barbot & Son.
Health District No. 2—Dr. Joshua Lockwood.
Health District No. 3—I. R. Wilson & Co.
Health District No. 4—Frank M. Smith.
Health District No. 5—Walter Speissegger.
Health District No. 6—W. H. Zeigler.

GARBAGE, GRASS, ETC.

Number of cart loads of garbage, grass, bushes, etc., hauled out of the city in 1905	38,193
Number of cart loads of street sweepings hauled out of the city in 1905	<u>13,817</u>
Total number of cart loads hauled out in 1905	52,010
Number of dead animals hauled out in 1905	175

From

South Carolina - ...

...

...

1907, ...

...

Latitude N., 32° 47'. Longitude W., 79° 56'. Observations made at 8 A. M. and 8 P. M., 75th Meridian time. Local time is 20 minutes slower than 75th Meridian time.

ANNUAL METEOROLOGICAL SUMMARY OF CHARLESTON, S. C., FOR THE YEAR ENDING DECEMBER 31, 1905.

U. S. DEPARTMENT OF AGRICULTURE,
LOCAL WEATHER BUREAU,
Charleston, S. C., January 1, 1906.
[Compiled for the City Board of Health.]

ANNUAL SUMMARY OF METEOROLOGICAL OBSERVATIONS MADE BY THE
U. S. DEPARTMENT OF AGRICULTURE, LOCAL OFFICE,
WEATHER BUREAU, CHARLESTON, S. C., 1905.

AIR PRESSURE.

Mean, corrected for temperature, instrumental error and gravity, 8 a. m., 30.05 inches.

Mean, corrected for temperature, instrumental error and gravity, 8 p. m., 30.01 inches.

Mean annual, corrected for temperature, instrumental error and gravity, 30.02 inches.

Mean, reduced to sea-level, 8 a. m., 30.10 inches.

Mean, reduced to sea-level, 8 p. m., 30.06 inches.

Mean annual, reduced to sea-level, 30.07 inches.

Highest, reduced to sea-level, 30.63 inches, December 5.

Lowest, reduced to sea-level, 29.52 inches, April 13.

Annual range in pressure, 1.11 inches.

The average annual pressure, reduced to sea-level, of Charleston, S. C., for 30 years, is 30.06 inches. For the months: January, 30.15 inches; February, 30.12; March, 30.05; April, 30.03; May, 30.01; June, 30.01; July, 30.02; August, 30.01; September, 30.04; October, 30.06; November, 30.11; December, 30.14.

The extreme ranges in atmosphere pressure reduced to sea-level of Charleston, S. C., for the months during the past 33 years, are as follows: January: highest, 30.83 inches, on January 2, 1899; lowest, 29.42 inches, on January 8, 1886. February: highest, 30.66 inches, on February 28, 1897; lowest, 29.20 inches, on February 6, 1896. March: highest, 30.72 inches, on March 6, 1873; lowest, 29.33 inches, on March 11, 1896. April: highest, 30.58 inches, on April 21, 1897; lowest, 29.29 inches, on April 13, 1877. May: highest, 30.42 inches, on May 21, 1891; lowest, 29.48 inches, on May 21, 1883. June: highest, 30.35 inches, on June 1, 1902; lowest, 29.31, on June 17, 1882. July: highest, 30.36 inches, on July 19, 1896; lowest, 29.70 inches, on July 12, 1879. August: highest, 30.28 inches, on August 21, 1882; lowest, 28.76 inches, on August 25, 1885. September: highest, 30.40 inches, on September 30, 1871; lowest, 29.27 inches, on September 26, 1894. October: highest, 30.59 inches, on October 26, 1879; lowest, 28.91 inches, on October 13, 1893. November: highest, 30.70 inches, on November 19, 1891; lowest, 29.14 inches, on November 17, 1873. December: highest, 30.74 inches, on December 28, 1896; lowest, 29.28 inches, on December 10, 1878. Absolute ranges: maximum, 30.83 inches, on January 2, 1899; minimum, 28.76 inches, on August 25, 1885.

AIR TEMPERATURE.

Mean, 8 a. m., 62.0 degrees.

Mean, 8 p. m., 65.2 degrees.

Mean annual, 65.5 degrees.

The average annual temperature, of Charleston, S. C., for thirty years, is 66.1 degrees. For the months: January, 49.9 degrees; February, 52.7; March, 57.3; April, 64.8; May, 72.9; June, 79.4; July, 81.9; August, 81.0; September, 76.4; October, 66.9; November, 58.3; December, 51.6.

Highest, 97, June 24.

Lowest, 17, January 26.

Annual range in temperature, 80.

Greatest daily range, 31, February 13th.

Least daily range, 3, September 16th.

Greatest monthly range, 52, in January.

Least monthly range, 24, in July.

Mean monthly range, 36.

Mean daily range, 14.

Number of days on which temperatures were 90 degrees or above: 20; in May, 2 days; in June, 6; July, 8; August, 3; September, 1.

The average number of days on which temperature were above 90, at Charleston, S. C., for 30 years, is 6. For the months: June, 6 days; July, 11; August, 6; September, 1.

Number of days on which temperatures were 32 degrees or below: 19; in January, 10 days; February, 8; December, 1.

The average number of days on which temperatures were below 32, at Charleston, S. C., for 30 years, is 7 days. For the months: January, 3 days; February, 2; December, 2.

Last ice formed, February 16.

First ice formed, December 5.

The highest and lowest monthly mean temperatures, for the months, of Charleston, S. C., during the past 33 years, are as follows: January: highest monthly mean, 59.3 degrees in 1890; lowest monthly mean, 42.0, in 1886; February, highest, 61.0, in 1884; lowest, 41.1, in 1895. March: highest, 64.4, in 1871; lowest, 51.8, in 1872. April: highest, 69.8, in 1871; lowest, 59.2, in 1901. May: highest, 76.8, in 1896; lowest, 68.6, in 1877. June: highest, 82.6, in 1871; lowest, 75.7, in 1884. July: highest, 85.4, in 1875; lowest, 78.8, in 1894. August: highest, 84.2, in 1900; lowest, 77.9, in 1874. September: highest, 80.5, in 1881; lowest, 72.0, in 1871. October: highest, 72.2, in 1881; lowest, 62.2, in 1876. November: highest, 63.2, in 1902; lowest, 53.2, in 1901. December: highest, 60.0, in 1889; lowest, 43.8, in 1876. Highest annual mean, 67.8, year 1890; lowest annual mean, 64.0, year 1886.

The extreme ranges in temperature, at Charleston, S. C., for the months, during the past 33 years are as follows: January, maximum, 80 degrees, January 29, 1879; minimum, 10, January 11, 1886. February, maximum, 80, February 18, 1891; minimum, 7, February 14, 1899. March, maximum, 86, March 21, 1897; minimum, 24, March 5, 1873. April, maximum, 89, April 21, 1896; minimum, 32, April 2, 1881. May, maximum, 98, May 30, 1898; minimum 45, May 20, 1894. June, maximum, 100, June 14, 1880; minimum, 51, June 1, 1889. July, maximum, 104, July 12, 1879; minimum, 64, July 10, 1894. August maximum, 100, August 4, 1899; minimum, 62, August 10, 1879. September, maximum, 95, September 7, 1899; minimum, 49, September 25, 1887. October, maximum, 93, October 3, 1883; minimum, 39, October 27, 1898. November, maximum, 82, November 23, 1899; minimum, 23, November 30, 1872. December, maximum, 78, December 11, 1889; minimum, 13, December 30, 1880. Absolute ranges, maximum, 104, on July 12, 1879; minimum, 7, on February 14, 1899.

MOISTURE.

Mean dew-point, 8 a. m., 56 degrees.

Mean dew-point, 8 p. m., 58 degrees.

Mean annual dew-point, 57 degrees.

The average annual dew-point, of Charleston, S. C., for thirty years, is 57 degrees. For the months: January, 41 degrees; February, 44; March, 47; April, 54; May, 63; June, 70; July, 72; August, 73; September, 69; October, 59; November, 50; December, 44.

Mean relative humidity, 8 A. M., 81 per cent.

Mean relative humidity, 8 P. M., 79 per cent.

Mean annual relative humidity, 80 per cent.

The average annual relative humidity, of Charleston, S. C., for thirty years, is 76 per cent. For the months: January, 77 per cent.; February, 75; March, 74; April, 73; May, 74; June, 76; July, 77; August, 79; September, 79; October, 77; November, 76; December, 76.

Mean vapor pressure, 8 A. M., 0.509 inch.

Mean vapor pressure, 8 P. M., 0.536 inch.

Mean annual pressure, 0.523 inch.

WEATHER.

Mean cloudiness (scale 0 to 10 tenths), 8 A. M., 4.8 tenths.

Mean cloudiness, 8 P. M., 5.0 tenths.

Mean annual cloudiness, 5.2 tenths.

The average annual cloudiness, of Charleston, S. C., for thirty years, is 4.7 tenths. For the months: January, 5.0 tenths; February, 5.1; March, 4.6; April, 4.2; May, 4.2; June, 5.1; July, 5.3; August, 5.2; September, 4.8; October, 3.9; November, 4.2; December, 4.5.

Greatest monthly cloudiness, 7.6 tenths, in December.

Least monthly cloudiness, 3.9 tenths, in November.

There were 119 clear days, distributed as follows: January, 12 days; February, 6; March, 14; April, 14; May, 6; June, 12; July, 9; August, 8; September, 7; October, 8; November, 14; December, 9.

The average annual number of clear days, of Charleston, S. C., for thirty years, is 130 days. For the months: January, 9 days; February, 10; March, 12; April, 13; May, 12; June, 8; July, 8; August, 8; September, 10; October, 14; November, 13; December, 13.

There were 155 partly cloudy days, distributed as follows: January, 14 days; February, 10; March, 9; April, 12; May, 19; June, 14; July, 15; August, 14; September, 18; October, 13; November, 11; December, 1.

The average annual number of partly cloudy days, of Charleston, S. C., for thirty years, is 147 days. For the months: January, 12 days; February, 10; March, 11; April, 12; May, 14; June, 14; July, 16; August, 15; September, 12; October, 11; November, 10; December, 10.

There were 91 cloudy days, distributed as follows: January, 5 days; February, 12; March, 8; April, 4; May, 6; June, 4; July, 7; August, 4; September, 5; October, 10; November, 5; December, 21.

The average annual number of cloudy days, of Charleston, S. C., for thirty years, is 88. For the months: January, 10 days; February, 8; March, 8; April, 5; May, 5; June, 8; July, 7; August, 8; September, 8; October, 6; November, 7; December, 8.

There were 21 days on which dense fog was observed, distributed as follows: January, 2 days; February, 2; March, 5; April, 1; May, 1; July, 1; September, 2; October, 2; November, 2; December, 3.

SUNSHINE.

There were 2,830.3 hours of sunshine during 1905, distributed as follows: January, 235.6 hours; February, 158.0; March, 254.9; April, 301.4; May, 279.3; June, 302.9; July, 262.4; August, 276.1; September, 230.6; October, 199.3; November, 212.0; December, 117.8.

The possible number of hours of sunshine in any year is 4,435.6 hours (leap year, 4,459.3 hours), as follows: January, 317.7 hours; February, 308.4; (February, leap year, 319.8); March, 371.7; April, 390.3; May, 430.1; June, 428.4; July 436.9; August, 413.7; September, 371.1; October, 351.9; November, 313.8; December, 301.6.

The percentage of sunshine during the year 1905 was 63 per cent. For the months: January, 7 per cent.; February, 51; March, 69; April, 77; May, 65; June, 71; July, 60; August, 67; September, 62; October, 57; November, 68; December, 38.

WIND.

Prevailing direction, south.

Total annual movement, 96,510 miles.

The average annual movement of wind, of Charleston, S. C., for thirty years, 72,848 miles. For the months: January, 6,015 miles; February, 6,013; March, 6,635; April, 6,570; May, 6,629; June, 6,066; July, 5,851; August, 5,599; September, 5,949; October, 6,303; November, 5,552; December, 5,666.

Greatest monthly movement, 9,079 miles in December.

Least monthly movement, 7,201, in September.

Highest velocity, 48 miles per hour, from the N. E., December 8.

Number of times the wind was observed blowing (at 8 A. M. and 8 P. M., 1905): From the N., 113 times, or 15 per cent.; N. E., 95, or 13 per cent.; E., 109, or 15 per cent.; S. E., 74, or 10 per cent.; S., 123, or 15 per cent.; S. W., 96, or 13 per cent.; W., 66, or 9 per cent.; N. W., 54, or 7 per cent.; calms, none (0).

The normal percentages of the wind-direction, of Charleston, S. C., for thirty years, are: N., 11 per cent.; N. E., 16; E., 12; S. E., 7; S., 10; S. W., 226; W., 11; N. W., 8; calms, 3.

The monthly normal wind-directions, with percentages, of Charleston, S. C., for thirty years, are: January, N., 17 per cent.; February, S. W., 21; March, S. W., 25; April, S. W., 30; May, S. W., 26; June, S. W., 30; July, S. W., 36; August, S. W., 26; September, N. E., 26; October, N. E., 27; November, N. E., 20; December, N. E., 17.

The average hourly wind velocity, for the year 1905, is 11.0 miles per hour. The mean hourly values, for the same period, are: 1 A. M., 9.7 miles; 2 A. M., 9.5;

3 A. M., 9.4; 4 A. M., 9.3; 5 A. M., 9.5; 6 A. M., 9.4; 7 A. M., 9.6; 8 A. M., 10.0; 9 A. M., 10.6; 10 A. M., 11.2; 11 A. M., 11.6; 12, noon, 12.3; 1 P. M., 13.2; 2 P. M., 13.4; 3 P. M., 13.9; 4 P. M., 13.7; 5 P. M., 13.3; 6 p. m., 12.2; 7 P. M., 11.1; 8 P. M., 10.4; 9 P. M., 10.4; 10 P. M., 10.2; 11 P. M., 10.3; 12, midnight, 10.0.

The average annual hourly wind velocity, of Charleston, S. C., for twenty years, is 8.6 miles. Mean hourly values: 1 A. M., 7.3 miles; 2 A. M., 7.1; 3 A. M., 7.1; 4 A. M., 7.0; 5 A. M., 7.1; 6 A. M., 7.0; 7 A. M., 7.2; 8 A. M., 7.0; 9 A. M., 8.4; 10 A. M., 8.9; 11 A. M., 9.4; 12, noon, 9.8; 1 P. M., 10.6; 2 P. M., 10.1; 3 P. M., 11.3; 4 P. M., 11.2; 5 P. M., 11.0; 6 P. M., 9.9; 7 P. M., 8.7; 8 P. M., 7.9; 9 P. M., 7.6; 10 P. M., 7.5; 11 P. M., 7.4; 12, midnight, 7.3.

The greatest and least maximum velocities at Charleston, S. C., for the months, during the past thirty-three years, are as follows: January, greatest maximum velocity, 40 miles per hour, from the E., on January 30, 1878; least maximum velocity, 10 miles per hour, from the W., on January 6, 1871. February, greatest maximum, 56 S. E., February 6, 1897; least maximum, 23 N. E., February 14, 1877; March, greatest maximum, 55, N. E., March 29, 1903; least maximum, 16, E., March 28, 1872. April, greatest maximum, 66, S., April 20, 1893; least maximum, 16, N. E., April 15, 1871. May, greatest maximum, 53, N. E., May 9, 1903; least maximum, 22, E., May 16, 1885. June, greatest maximum, 54, E., June 16, 1893; least maximum, 16, S. W., June 30, 1871. July, greatest maximum, 43, N., July 4, 1902; least maximum, 16, E., July 28, 1872. August, greatest maximum, 96, E., August 28, 1893; least maximum, 18, E., August 26, 1874. September greatest maximum, 62, S., September 29, 1896; least maximum, 20, N. E., September 21, 1871. October, greatest maximum, 62, E., October 2, 1898; least maximum, 12, N. E., October 21, 1871. November, greatest maximum, 46, E., November 14, 1888; least maximum; 16, N., November 2, 1885. December, greatest maximum, 50 S. E., December 17, 1888; least maximum, 12, W., December 4, 1871. Absolute maximum velocities: Greatest maximum velocity, 96 miles per hour, from the E., on August 28, 1903; least maximum, 10 miles per hour, from the W., January 6, 1871.

Total rainfall (melted snow, sleet and hail included), 34.85 inchse.

Total depth of snowfall, trace.

Greatest monthly rainfall, 5.70 inches, in July.

Least monthly rainfall, 0.94 inch. in November.

Greatest rainfall in any 24 consecutive hours, 2.09 inches, October 25th and 26th.

The average annual precipitation, of Charleston, S. C., for 34 years, is 52.87 inches. For the months: January, 3.62 inches; February, 3.37; March, 3.68; April, 3.10; May, 3.52; June, 5.38; July, 7.39; August, 7.31; September, 5.48; October, 3.99; November, 2.92; December, 3.11.

There were 110 "rainy" days (or days on which 0.01 inch, or more, of precipitation occurred), distributed as follows: January, 7 days; February, 11; March, 7; April, 7; May, 15; June, 8; July, 15; August, 10; September, 9; October, 5; November, 3; December, 13.

The average annual number of "rainy" days, of Charleston, S. C., for thirty years, is 119. For the months: January, 10 days; February, 10; March, 10; April, 8; May, 9; June, 11; July, 12; August, 14; September, 10; October, 8; November, 8; December, 9.

There were 68 thunderstorms, distributed as follows: February, 1 day; March, 2; April, 6; May, 15; June, 5; July, 17; August, 12; September, 8; December, 2.

The average annual number of thunderstorms, of Charleston, S. C., for twenty years, is 49. For the months: January, 1; February, 1; March, 2; April, 3; May, 5; June, 10; July, 11; August, 10; September, 3; October, 1; November, 1; December, 1.

The extreme amounts of precipitation, for the months, of Charleston, S. C., during the past thirty-three years, are as follows: January, greatest, 7.83 inches, in 1878; least, 0.19 inch, in 1898. February, greatest, 10.45, in 1874; least, 0.51, in 1898. March, greatest, 9.78, in 1872; least, 0.50, in 1887. April, greatest, 15.00, in 1877; least, 0.51, in 1892. May, greatest, 8.62, in 1883; least, 0.48, in 1881. June, greatest, 16.50, in 1893; least, 1.20, in 1891. July, greatest, 13.74, in 1874; least, 1.05, in 1875. August, greatest, 19.18, in 1885; least, 0.40 in 1900. September, greatest, 11.89, in 1890; least, 0.40, in 1901. October, greatest, 14.32, in 1876; least, 0.01, in 1886. November, greatest, 7.54, in 1888; least, 0.33, in 1886. December, greatest, 7.91, in 1887; least, 0.03, in 1889. Absolute monthly maximum,

19.18 inches, in August, 1885; absolute monthly minimum, 0.01 inch, in October, 1886.

The greatest depth of snowfall, for the months, of Charleston, S. C., during the past eighteen years (the record of snowfall measurements extending back to the winter of 1884-'85 only), is as follows: January, greatest depth, 1.9 inches, occurred on January 18, 1893. February, greatest depth, 3.9 inches, occurred on February 12 and 13, 1899. March, greatest depth, trace (less than 0.05 inch), occurred on March 2, 1890. November, greatest depth, 0.0. December, greatest depth, 0.5 inch, occurred on December 31, 1899.

The last killing frost of spring occurred February 16.

The last heavy frost of spring occurred April 17.

The last light frost of spring occurred April 18.

The first light frost of autumn occurred November 12.

The first heavy frost of autumn occurred December 5.

The first killing frost of autumn occurred December 11.

R. Q. GRANT,
Local Forecaster.

STATISTICS
OF
Jail Reports for 1906.

YEARLY JAIL REPORT.

Below are statistics relating to prisoners in the Jail of the County of Aiken, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

	Months.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Number					24								
Color—													
White					3								
Colored					21								
Sex—													
Male					24								
Female													
Age—													
10 to 20					5								
20 to 40					18								
40 to 60					1								
Offenses—													
Lunacy													
Assessory to Murder					71								
Assault and Battery					5								
Grand Larceny					2								
Petit Larceny					1								
Perjury					1								
Buggery					1								
Violation Sec. 299					1								

YEARLY JAIL REPORT.

Below are statistics relating to prisoners in the Jail of the County of Beaufort, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

	Months.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Number .. .		11	20										*7
Color—													
White .. .			1										*7
Colored .. .		11	19										
Sex—													
Male .. .		9	17										*5
Female .. .		1	2										*2
Age—													
10 to 20 .. .		4	5										*2
20 to 40 .. .		4	11										*5
40 to 60 .. .		3	4										
Offenses—													
Murder .. .		2	6										*4
Assault and Battery .. .		1	2										*1
Grand Larceny .. .		3	1										*1
Petit Larceny .. .		1	4										
Rocking Train .. .		3	3										
Horse Stealing .. .		1	1										
Burglary .. .													*1
Gambling .. .			1										

Those figures before which a star (*) is placed are for December, 1905.

YEARLY JAIL REPORT.

Below are statistics relating to prisoners in the Jail of the County of Bamberg, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

No reports of any kind on blanks returned.

YEARLY JAIL REPORT.

Below are statistics relating to prisoners in the Jail of the County of Berkeley, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

	Months.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Number		5	9	12	...	11	15	12	...	9	6	*16
Color—												
White		2	3	2	...	1	1	1	...	1	1	*2
Colored		3	6	10	...	10	14	11	...	8	5	*14
Sex—												
Male		5	9	11	...	11	13	11	...	9	6	*16
Female				1	...		2	1	...			
Age—												
10 to 20			2	2	...	2	2	3	...	1	1	...
20 to 40		4	7	3	...	8	10	8	...	8	2	*12
40 to 60		1	...	2	...	1	3	1	...		3	*4
Offenses—												
Lunacy						1	4	1	...		1	...
Murder		4	4	4	...	4	5	6	...	2		*6
Assault and Battery			1	3	...	4	4	3	...		3	*1
Grand Larceny	1		*3
Petit Larceny			2		...		1		...	2	1	*3
Larceny Live Stock		1	1		...	1		1	...			...
Robbing Train
Adultery				1	...		1	1	...			...
Fraud	2	1	...
Breach of Peace	1		...
Forgery	1		...
Sick		2		...		1	...

Those figures before which a star (*) is placed are for December, 1905.

YEARLY JAIL REPORT.

Below are statistics relating to prisoners in the Jail of the County of Charleston, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

	Months.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Number	8	...	8	...	6	6	4	...	...	8	8	*7	...
Color—													
White										1	...	...	...
Colored	8	...	1	...	6	6	4	...	...	7	8	*7	...
Sex—													
Male	6	...	5	...	5	6	3	...	...	4	7	*4	...
Female	2	...	2	...	1	...	1	...	...	4	1	*3	...
Age—													
10 to 20	2	...	3	...	1	...	...	...	...	3	1	...	...
20 to 40	5	...	5	...	5	...	...	...	...	4	6	...	...
40 to 60 .....	...	...	...	...	...	...	...	...	...	1	1	...	...
Offenses—													
Murder	1	...	...	...	...	...	...	...	...	...	...	...	...
Misdemeanor	2	...	3	...	2	...	...	...	...	1	1	*2	...
Assault and Battery	1	...	4	...	...	1	2	...	...	...	1	*2	...
Grand Larceny	1	...	...	...	1	...	...	...	...	...	...	...	...
Petit Larceny	1	...	...	...	1	2	1	...	...	...	...	...	...
House Breaking .....	...	...	...	...	...	...	1	...	...	...	...	*1	...
Burglary and Larceny .....	...	...	1	...	...	...	...	...	...	...	...	*1	...
Bench Warrant .....	...	...	...	...	2	...	...	...	...	...	1	...	...
Gambling .....	...	...	...	...	...	2	...	...	...	...	...	...	...
Disorderly .....	...	...	...	...	...	...	...	...	...	5	4	...	...
Firing Pistol .....	...	...	...	...	...	...	...	...	...	1	...	...	...
Forgery .....	...	...	...	...	...	...	...	...	...	...	1	...	...
Sick .....	...	...	...	...	6	6	4	...	...	...	...	...	...

Those figures before which a star (*) is placed are for December, 1905.

YEARLY JAIL REPORT.

Below are statistics relating to prisoners in the Jail of the County of Chesterfield, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

No report of any kind on blank returned.

YEARLY JAIL REPORT.

Below are statistics relating to prisoners in the Jail of the County of Chester, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

	Months.												Total
	January	February	March	April	May	June	July	August	September	October	November	December	
Number	14	15	...	7	9	5	...	9	...	13	*8	...	...
Color—													
White	1	...	...	...	7	9	5	...	9	...	13	*1	...
Colored	13	15	...	...	...	...	...	...	...	...	...	*7	...
Sex—													
Male	8	14	...	7	8	4	...	6	...	12	*6	...	...
Female	5	1	...	...	1	1	...	3	...	1	*2	...	...
Age—													
10 to 20	2	3	...	1	1	...	...	...	...	1	*1	...	...
20 to 40	10	10	...	6	8	...	...	9	...	12	*6	...	...
40 to 60	2	2	...	...	...	...	...	...	...	...	*1	...	...
Offenses—													
Murder	7	7	...	4	6	5	...	5	...	4	*4	...	...
Assault and Battery	1	...	...	...	...	...	...	12	...	2	...	...	...
Grand Larceny . . . . .	...	1	...	...	...	...	...	...	...	...	...	...	...
Petit Larceny	2	3	...	3	2	...	...	...	...	3	...	...	...
Rape . . . . .	...	...	...	...	...	...	...	...	...	2	...	...	...
Robbery	2	2	...	...	...	...	...	...	...	...	*2	...	...
Car Breaking . . . . .	...	1	...	...	1	...	...	...	...	...	...	...	...
House Breaking . . . . .	...	1	...	...	...	...	...	...	...	...	...	...	...
Resisting Arrest . . . . .	...	1	...	...	...	...	...	...	...	...	...	...	...
Violation Dispensary Law . . . . .	...	...	...	...	...	...	...	1	...	...	...	...	...
Seduction . . . . .	...	...	...	...	...	...	...	1	...	...	...	...	...

Those figures before which a star (*) is placed are for December, 1905.

YEARLY JAIL REPORT.

Below are statistics relating to prisoners in the Jail of the County of Clarendon, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Number	22	23	20	17	20	...	...	...	...	7	...	*23	...
Color—													
White	2	2	2	1	1	...	...	...	...	...	...	*2	...
Colored	20	21	18	16	19	...	...	...	...	7	...	*21	...
Sex—													
Male	22	23	17	16	19	...	...	...	...	7	...	*23	...
Female .. . . .	...	...	1	1	...	...	...	...	...	...	...	...	...
Age—													
10 to 20	7	8	4	6	4	...	...	...	...	...	...	*5	...
20 to 40	12	12	13	10	15	...	...	...	...	7	...	*16	...
40 to 60	3	3	3	1	1	...	...	...	...	...	...	*1	...
Offenses—													
Murder and Attempted													
Murder	4	4	4	4	4	...	...	...	...	...	...	*6	...
Misdemeanor .. . . .	...	...	1	...	...	...	...	...	...	...	...	*2	...
Assault and Battery .. . . .	...	3	3	4	4	...	...	...	...	...	...	...	...
Grand Larceny	1	...	...	...	...	...	...	...	...	...	...	...	...
Petit Larceny	2	1	1	...	...	...	...	...	...	3	...	*2	...
Rape .. . . .	...	2	2	2	2	...	...	...	...	...	...	...	...
Arson .. . . .	...	1	1	...	...	...	...	...	...	...	...	...	...
House Breaking & Larceny	5	5	3	3	3	...	...	...	...	...	...	*4	...
Burglary	1	1	...	1	...	...	...	...	...	...	...	*1	...
Damage to Public Road .. . . .	...	...	...	...	...	...	...	...	...	...	...	*2	...
Abduction	1	...	...	...	...	...	...	...	...	...	...	*1	...
Obtaining Goods Falsely	2	1	2	...	...	...	...	...	...	1	...	*2	...
Violation of Contract	2	1	1	2	5	...	...	...	...	2	...	*1	...
Breach of Trust	1	1	1	1	...	...	...	...	...	...	...	...	...
Poll Tax .. . . .	...	...	...	...	1	...	...	...	...	...	...	...	...
Drunk .. . . .	...	...	...	...	...	...	...	...	...	1	...	...	...
Sick .. . . .	...	...	...	...	...	...	...	...	...	1	...	...	...

Those figures before which a star (*) is placed are for December, 1905.

YEARLY JAIL REPORT.

Below are statistics relating to prisoners in the Jail of the County of Colleton, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Number	8	10	13	5	10	8	19	16	20	29	29	29	...
Color—													
White	2	2	2	1	..	..	..	1	..	..	..	..	...
Colored	6	8	11	4	10	8	19	15	20	29	29	29	...
Sex—													
Male .. . . .	..	..	..	..	..	..	..	..	..	..	29	..	...
Offenses—													
Lunacy .. . . .	..	..	..	..	..	..	1	1	..	..	2	..	...
Murder	4	3	4	2	1	2	2	2	..	2	6	..	...
Misdemeanor .. . . .	..	..	..	..	2	1	1	..	..	..	..	..	...
Assault and Battery .. . . .	..	..	..	1	1	1	1	5	..	..	2	..	...
Grand Larceny .. . . .	..	1	..	..	..	..	..	2	..	1	3	..	...
Petit Larceny .. . . .	..	..	1	..	1	..	..	..	..	1	1	..	...
Rape .. . . .	..	..	..	..	..	..	..	..	..	1	1	..	...
Arson .. . . .	..	..	..	..	..	..	..	..	..	..	..	..	...
Forgery	2	..	..	..	..	..	..	..	..	..	..	..	...
House Breaking & Larceny	1	1	4	..	..	..	2	6	..	6	5	..	...
False Pretense .. . . .	..	2	..	..	..	..	..	..	..	..	1	..	...
Trespass .. . . .	..	1	..	..	..	..	..	..	..	..	..	..	...
Larceny of Live Stock .. . . .	..	1	..	1	2	2	3	..	..	1	3	..	...
Violation of Contract .. . . .	..	..	..	1	..	..	1	..	..	..	..	..	...
Sick .. . . .	..	..	..	..	..	..	..	1	..	..	..	..	...

YEARLY JAIL REPORT.

Below are statistics relating to prisoners in the Jail of the County of Darlington, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Number	19	18	18	7	8	17	10	...	18	8	12	*16	...
Color—													
White	2	3	...	1	1	4	2	...	2	...	1	*2	...
Colored	17	15	18	6	7	13	8	...	16	8	11	*14	...
Sex—													
Male	17	17	17	7	7	15	10	...	16	8	12	*14	...
Female	2	1	1	1	1	2	...	...	2	...	...	*2	...
Age—													
10 to 20	4	5	4	1	...	1	1	...	1	1	2	*3	...
20 to 40	14	11	14	5	7	14	8	...	17	4	6	*12	...
40 to 60	1	2	...	1	1	2	1	...	...	3	4	*1	...
Offenses—													
Lunacy	1	...	...	1	1	...	1	...	...	...	1	*1	...
Murder .. . . .	...	1	2	...	...	1	3	...	1	...	1	...	...
Misdemeanor	2	...	1	...	...	...	...	...	...	...	1	*1	...
Assault and Battery	3	3	2	...	...	...	1	...	4	2	3	*3	...
Grand Larceny	1	...	...	1	...	...	...	...	...	...	...	...	...
Petit Larceny	4	...	2	1	1	2	...	...	1	...	1	*2	...
Breach of Trust .. . . .	...	...	...	...	...	...	...	...	...	...	1	...	...
Arson .. . . .	...	...	...	...	...	...	...	...	...	1	...	...	...
Burglary and Larceny	3	5	6	1	4	4	1	...	...	...	2	*3	...
House Breaking	2	3	3	...	...	...	...	...	3	2	1	*2	...
Forgery	1	1	1	...	...	...	...	...	...	...	...	...	...
Violation Dispensary Law .. . . .	...	1	...	...	...	1	...	...	1	...	...	...	...
Using Stock .. . . .	...	2	...	...	...	...	...	...	...	...	...	*1	...
Violation U. S. Law .. . . .	...	...	...	3	2	2	1	...	1	1	...	...	...
False Pretense .. . . .	...	...	...	...	...	1	...	...	...	...	...	...	...
Receiving Stolen Goods .. . . .	...	...	...	...	...	1	...	...	...	...	...	...	...
Violation of Contract .. . . .	...	...	...	...	...	...	2	...	3	...	...	...	...
Concealed Weapon .. . . .	...	...	...	...	...	...	...	...	1	...	...	...	...

Those figures before which a star (*) is placed are for December, 1905.

YEARLY JAIL REPORT.

Below are statistics relating to prisoners in the Jail of the County of
Dorchester, S. C., for the year 1906, giving age, sex, color, sickness,
deaths, offenses.

	Months.											
	January.	February	March.	April.	May.	June.	July.	August.	September	October.	November.	December.
Number	4	3	7	3	10	7	12	...	10	19	8	*4
Color—												
White	4	3	7	3	9	7	11	...	10	18	8	*4
Colored	4	3	7	3	9	7	11	...	10	18	8	*4
Sex—												
Male	4	3	7	3	10	7	11	...	9	19	7	*3
Female	4	3	7	3	10	7	11	...	9	19	7	*3
Age—												
10 to 20	1	1	1	1	2	2	3	...	2	4	2	*1
20 to 40	3	2	5	2	7	4	3	...	5	14	2	*3
40 to 60 .. . . .	...	...	1	...	1	1	1	...	**2	1	...	...
Offenses—												
Murder	1	1	1	...	...	...	...	...	1	...	...	...
Attempt to Murder .. . . .	...	...	...	...	2	...	...	...	...	...	...	...
Assault and Battery .. . . .	...	...	...	...	2	1	1	...	1	8	4	...
Grand Larceny .. . . .	...	...	...	...	...	...	...	...	...	...	...	*3
Petit Larceny	1	1	1	...	...	...	...	...	1	2	...	*1
Breaking Contract	1	...	...	...	...	...	1	...	...	...	...	...
House Breaking	1	1	...	1	3	4	5	...	2	3	1	...
Riot .. . . .	...	...	3	2	...	...	1	...	1	...	...	...
False Pretense .. . . .	...	...	1	...	...	...	...	...	1	...	...	...
Car Breaking .. . . .	...	...	...	...	1	1	1	...	...	...	...	...
Conspiracy .. . . .	...	...	...	...	...	...	...	...	...	1	...	...
Carrying Weapons .. . . .	...	...	...	...	...	...	...	...	...	1	...	...
Riot .. . . .	...	...	...	...	...	...	...	...	...	1	...	...
Sick .. . . .	...	...	...	...	...	...	4	...	3	5	1	...

Those figures before which a star (*) is placed are for December, 1905.

** One 103 years old.

YEARLY JAIL REPORT.

Below are statistics relating to prisoners in the Jail of the County of Edgefield, S. C., for the year 1906, giving age, sex, color sickness, deaths, offenses.

	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Number	9	7	...	11	4	...	...	...	...	16	8	...	...
Color—													
White .. . . .	...	...	...	...	1	...	...	...	...	1	...	...	...
Colored	9	7	...	11	3	...	...	...	...	15	8	...	...
Sex—													
Male	7	5	...	8	4	...	...	...	...	15	8	...	...
Female	2	2	...	3	...	...	...	...	...	...	...	...	...
Age—													
10 to 20 .. . . .	...	2	...	2	1	...	...	...	...	1	1	...	...
20 to 40	5	2	...	3	2	...	...	...	...	12	5	...	...
40 to 60	4	3	...	1	1	...	...	...	...	3	3	...	...
Offenses—													
Lunacy .. . . .	...	...	...	...	...	...	...	...	...	...	...	...	...
Murder	6	4	...	4	1	...	...	...	...	5	3	...	...
Assault and Battery .. . . .	...	...	...	...	2	...	...	...	...	...	...	...	...
Grand Larceny	1	1	...	...	...	...	...	...	...	...	...	...	...
Petit Larceny .. . . .	...	1	...	1	...	...	...	...	...	7	2	...	...
Arson .. . . .	...	...	...	...	1	...	...	...	...	...	...	...	...
Highway Robbery	1	...	...	...	...	...	...	...	...	...	...	...	...
Poisoning	1	1	...	...	...	...	...	...	...	...	...	...	...
Violation of Contract .. . . .	...	...	...	2	...	...	...	...	...	2	...	...	...
Violation Dispensary Law .. . . .	...	...	...	...	...	...	...	...	...	2	...	...	...

YEARLY JAIL REPORT.

Below are statistics relating to prisoners in the Jail of the County of Florence, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Number	19	18	5	9	8	10	8	7	15	21	*20	...	...
Color—													
White	1	3	1	1	...	1	...	...	2	3	...	...	...
Colored	18	15	4	8	8	9	8	7	13	18	*20	...	...
Sex—													
Male	18	17	5	8	6	7	6	6	13	19	*18	...	...
Female	1	1	...	1	2	3	2	1	...	2	*2	...	...
Age—													
10 to 20	2	1	...	...	1	1	1	1	1	...	...	...	...
20 to 40	17	17	5	8	7	9	7	7	14	20	*18	...	...
40 to 60 . . . . .	...	...	...	...	...	...	...	...	...	1	*2	...	...
Offenses—													
Lunacy . . . . .	...	...	...	...	1	...	1	...	...	...	1	...	...
Murder	6	9	2	2	2	2	2	...	3	...	...	*2	...
Misdemeanor	1	1	...	1	...	1	1	...	...	...	...	*2	...
Assault and Battery	2	1	...	1	1	1	3	3	5	...	...	*5	...
Grand Larceny	2	2	...	1	1	1	1	...	1	...	...	...	...
Petit Larceny . . . . .	...	1	...	2	...	...	2	1	...	...	...	*1	...
Forgery . . . . .	...	...	...	...	...	...	...	...	1	...	...	...	...
House Breaking & Larceny	3	2	...	...	...	2	...	...	3	3	...	*1	...
Perjury . . . . .	...	...	...	...	...	1	...	...	...	...	...	...	...
Larceny of Live Stock . . . . .	...	...	...	...	...	...	...	...	1	1	...	*1	...
Highway Robbery	1	1	...	...	...	...	...	...	...	...	...	*1	...
False pretense	1	1	...	...	...	...	...	...	2	2	...	*1	...
Breach of Trust . . . . .	...	...	...	...	...	...	...	...	...	...	...	*1	...
Carrying Pistol . . . . .	...	...	...	...	1	...	...	...	...	...	...	...	...
Adultery . . . . .	...	...	...	...	...	2	...	...	...	1	...	...	...
Nuisance . . . . .	...	...	...	...	1	...	...	...	...	...	...	...	...
Bond of Peace . . . . .	...	...	...	...	...	1	...	1	...	...	...	...	...
Bastardy . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...

Those figures before which a star (*) is placed are for December, 1905.

YEARLY JAIL REPORT.

Below are statistics relating to prisoners in the Jail of the County of Fairfield, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

	Months.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Number	17	19	...	...	...	...	...	6	17	...	...	*13
Color—												
White	1	5	...	...	...	...	...	...	5	...	...	*13
Colored	16	14	...	...	...	...	...	6	12	...	...	...
Sex—												
Male	15	19	...	...	...	...	...	4	17	...	...	*11
Female	2	...	...	...	...	...	...	2	2	...	...	*2
Age—												
10 to 20	2	1	...	...	...	...	...	...	14	...	...	*3
20 to 40	11	15	...	...	...	...	...	6	14	...	...	*10
40 to 60	4	3	...	...	...	...	...	...	...	...	...	...
Offenses—												
Lunacy . . . . .	...	1	...	...	...	...	...	...	...	...	...	...
Murder	6	2	...	...	...	...	...	...	3	...	...	*6
Misdemeanor	2	1	...	...	...	...	...	...	3	...	...	...
Assault and Battery	3	1	...	...	...	...	...	...	6	...	...	...
Petit Larceny . . . . .	...	...	...	...	...	...	...	1	1	...	...	*2
Rape . . . . .	...	...	...	...	...	...	...	1	...	...	...	...
Violation of Contract	1	1	...	...	...	...	...	...	3	...	...	*1
Robbery	1	...	...	...	...	...	...	...	...	...	...	*1
Violation Dispensary Law	1	...	...	...	...	...	...	...	...	...	...	...
Gambling . . . . .	...	10	...	...	...	...	...	...	...	...	...	...
Drunk . . . . .	...	...	...	...	...	...	...	...	1	...	...	...
False Pretense . . . . .	...	...	...	...	...	...	...	...	1	...	...	...

Those figures before which a star (*) is placed are for December, 1905.

YEARLY JAIL REPORT.

Below are statistics relating to prisoners in the Jail of the County of Greenwood, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Number	6	7	10	4	5	...	12	8	8	8	10	*4	...
Color—													
White . . . . .	...	...	...	...	1	...	1	...	...	...	...	...	...
Colored	6	7	10	4	4	...	11	6	8	8	10	*4	...
Sex—													
Male	5	6	10	3	4	...	12	8	8	8	10	*4	...
Female	1	1	...	1	1	...	...	...	...	...	...	...	...
Offenses—													
Murder . . . . .	...	1	3	1	...	...	3	4	3	3	4	...	...
Misdemeanor . . . . .	...	...	...	1	1	...	2	...	1	...	...	*1	...
Assault and Battery . . . . .	...	...	1	...	1	...	...	...	...	...	...	...	...
Grand Larceny . . . . .	...	...	...	1	...	...	...	...	...	2	...	...	...
Petit Larceny . . . . .	...	1	1	...	1	...	1	...	1	...	...	...	...
Rape . . . . .	...	1	1	...	...	...	...	...	...	...	...	...	...
House Breaking	3	3	3	...	...	...	3	1	2	...	2	*1	...
Violation of Contract	1	1	1	...	...	...	1	...	...	...	...	*1	...
Car Breaking . . . . .	...	...	...	...	...	...	...	1	...	...	...	...	...
Gambling . . . . .	...	...	1	...	...	...	...	...	...	1	1	...	...
Serving Sentence . . . . .	...	...	...	1	1	...	1	1	...	...	...	...	...
Obtaining Goods Falsely . . . . .	...	...	...	...	1	...	1	...	...	...	...	...	...
Violation Dispensary Law . . . . .	...	...	...	...	...	...	...	...	...	...	1	...	...
Sick . . . . .	...	...	...	...	...	...	...	1	...	...	1	...	...

Those figures before which a star (*) is placed are for December, 1905.

YEARLY JAIL REPORT.

Below are statistics relating to the prisoners in the Jail of the County of Hampton, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Number	7	15	10	4	...	5	13	...	15	18	...	*8	...
Color—													
White	5	6	4	...	...	...	...	...	1	3	...	*1	...
Colored	2	9	6	4	...	5	13	...	14	15	...	*7	...
Sex—													
Male	7	15	10	4	...	5	7	...	13	17	...	*8	...
Female . . . . .	...	...	...	...	...	...	6	...	2	1	...	...	...
Age—													
10 to 20 . . . . .	...	1	1	...	...	...	...	...	1	...	...	...	...
20 to 40 . . . . .	...	13	9	...	...	5	...	...	14	...	...	...	...
40 to 60 . . . . .	...	1	...	...	...	...	...	...	...	...	...	...	...
Offenses—													
Lunacy	1	1	...	...	...	...	...	...	3	2	...	...	...
Murder	5	9	4	1	...	1	1	...	3	6	...	*5	...
Assault and Battery	1	3	3	3	...	2	7	...	5	4	...	...	...
Petit Larceny . . . . .	...	1	...	...	...	...	...	...	1	4	...	*3	...
House Breaking . . . . .	...	...	1	...	...	...	1	...	1	1	...	...	...
Burglary . . . . .	...	...	...	...	...	...	1	...	...	1	...	...	...
Riot . . . . .	...	...	...	...	...	...	3	...	...	...	...	...	...
Adultery . . . . .	...	...	...	...	...	...	...	...	1	...	...	...	...
Sick . . . . .	...	1	1	...	...	1	...	...	...	...	...	...	...

YEARLY JAIL REPORT.

Below are statistics relating to the prisoners in the Jail of the County of Lancaster, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Number	11	13	16	2	6	12	6	6	...	11	8	*11	...
Color—													
White	5	...	2	...	...	...	1	2	...	1	2	*4	...
Colored	6	13	14	2	6	12	5	4	...	10	6	*7	...
Sex—													
Male	6	13	16	2	5	11	5	6	...	9	6	*10	...
Female . . . . .	...	...	...	...	1	1	1	...	...	2	...	*1	...
Age—													
10 to 20 . . . . .	...	3	3	...	1	3	2	1	...	8	1	*1	...
20 to 40	10	8	11	2	5	7	4	5	...	1	5	*9	...
40 to 60	1	2	2	...	...	2	...	...	...	...	2	*1	...
Offenses—													
Lunacy . . . . .	...	...	...	...	...	...	...	...	...	...	...	*1	...
Murder	2	2	4	1	1	...	...	...	...	1	1	*1	...
Misdemeanor	2	...	...	...	...	...	1	1	...	1	2	*1	...
Assault and Battery	3	4	1	...	...	...	...	2	...	2	...	*1	...
Grand Larceny . . . . .	...	...	...	...	...	...	1	...	...	2	...	...	...
Petit Larceny	1	4	2	...	...	...	...	1	...	...	1	*2	...
Arson . . . . .	...	...	...	...	2	2	...	...	...	...	...	...	...
House Breaking	1	1	1	...	1	1	1	1	...	1	...	*1	...
Disposing of Property . . . . .	...	...	...	...	...	3	...	...	...	...	...	*2	...
Violation of Contract . . . . .	...	1	2	...	1	3	3	1	...	...	...	...	...
Selling Liquor . . . . .	...	...	5	1	...	1	...	...	...	...	...	...	...
Obtaining Goods Falsely	1	...	...	...	...	...	...	...	...	1	2	...	...
Trespass	1	...	...	...	...	...	...	...	...	1	...	...	...
Breach of Trust . . . . .	...	...	...	...	...	1	...	...	...	...	...	...	...
Bigamy . . . . .	...	...	...	...	...	...	...	...	...	1	1	...	...
Sick . . . . .	...	...	...	...	1	2	...	...	...	...	...	...	...

Those figures before which a star (*) is placed are for December, 1905.

YEARLY JAIL REPORT.

Below are statistics relating to the prisoners in the Jail of the County of Laurens, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Number	20	13	8	9	12	5	16	...	24	14	...	*14	...
Color—													
White	1	4	...	1	2	...	4	...	2	...	...	...	...
Colored	19	9	8	8	10	5	12	...	22	14	...	*14	...
Sex—													
Male	18	13	8	8	11	5	15	...	24	14	...	*13	...
Female	2	...	...	...	1	...	1	...	1	...	...	*1	...
Age—													
10 to 20 . . . . .	...	3	...	...	...	...	...	...	3	...	...	*2	...
20 to 40 . . . . .	...	7	8	...	...	...	...	...	13	...	...	*12	...
40 to 60 . . . . .	...	3	...	...	...	...	...	...	1	...	...	...	...
Offenses—													
Lunacy . . . . .	...	...	...	...	...	...	...	...	...	...	...	*1	...
Murder	4	2	2	...	3	1	4	...	8	2	...	*2	...
Misdemeanor . . . . .	...	2	...	...	1	1	2	...	1	...	...	...	...
Assault and Battery	2	1	2	1	...	...	...	...	5	2	...	*1	...
Grand Larceny	1	...	...	...	...	...	...	...	...	...	...	*1	...
Petit Larceny . . . . .	...	...	...	...	1	...	...	...	5	2	...	...	...
Rape	1	...	...	...	...	...	1	...	1	...	...	...	...
Arson	1	1	1	1	1	...	...	...	1	1	...	*1	...
House Breaking	1	...	...	...	1	...	...	...	...	...	...	*1	...
Violation of Contract	2	2	...	3	2	3	5	...	2	6	...	*5	...
Gambling	1	...	...	...	...	...	...	...	...	...	...	...	...
Vagrancy	1	1	...	...	1	...	...	...	...	...	...	...	...
Violation Dispensary Law	2	...	...	...	...	...	...	...	...	...	...	...	...
Burglary	1	1	...	...	...	...	...	...	...	...	...	...	...
Beating Wife . . . . .	...	...	...	...	1	...	...	...	...	1	...	...	...
Obtaining Goods Falsely . . . . .	...	...	...	1	1	...	...	...	...	...	...	...	...
Disposing of Property . . . . .	...	...	...	...	1	...	...	...	1	...	...	...	...
Sick . . . . .	...	...	...	1	...	...	...	...	...	...	...	...	...

Those figures before which a star (*) is placed are for December, 1905.

YEARLY JAIL REPORT.

Below are statistics relating to the prisoners in the Jail of the County of Lexington, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

		Months.												
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Number	1	..	4	..	..	..	..	..	..	..
Color—														
White	2	..	..	..	..	..	..	..
Colored	1	..	2	..	..	..	..	..	..	..
Sex—														
Male	1	..	4	..	..	..	..	..	..	..
Age—														
10 to 20	1	..	..	..	..	..	..	..
20 to 40	1	..	3	..	..	..	..	..	..	..
Offenses—														
Petit Larceny	2	..	..	..	..	..	..	..
House Breaking	1	..	2	..	..	..	..	..	..	..

YEARLY JAIL REPORT.

Below are statistics relating to the prisoners in the Jail of the County of Lee, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

[illegible]

YEARLY JAIL REPORT.

Below are statistics relating to the prisoners in the Jail of the County of Richland, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

No report of any kind on blank returned.

YEARLY JAIL REPORT.

Below are statistics relating to the prisoners in the Jail of the County of Orangeburg, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

[illegible]

YEARLY JAIL REPORT.

Below are statistics relating to the prisoners in the Jail of the County of Pickens, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

No report of any kind on blank returned.

YEARLY JAIL REPORT.

Below are statistics relating to the prisoners in the Jail of the County of Sumter, S. C., for the year 1906, giving age, sex, color, sickness, deaths, offenses.

[illegible]